Sample Excerpts From

A CHRONICLE OF MADNESS:

A Memoir of American Nuclear War Planning

by Daniel Ellsberg
with Michael Ellsberg

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[Unedited Draft—Please Do Not Quote or Distribute]

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Note: 1) Every problem solved + "solution" + function is certain to arise in every new (+ old?) nuc state.
2) and "best" (US?) solutions now used will not be used in some other,
3) Compare presentation in films + books: Strangelove, Fail-Safe, (7 Days in May), Crimson Tide, (Kaosaster: Miriles...);
4) "Football"

Note on This Writing Sample:

The segments presented here appear chronologically, but they are by no means comprehensive: large gaps in between each of these segments remain (the writing I plan to do in the next two years). The majority of issues and events I wish to cover in this memoir are not even touched upon here. A chapter summary [forthcoming] will outline the entire book.

Background to the Events Narrated in This Writing Sample:

In 1957, after three years in the Marines, including several months as a rifle company commander, and several months as a **[x]** in the Mediterranean during the Suez Crisis, I came back to Harvard to do independent research, as Junior Fellow in the Society of Fellows, in the area that had most interested me since my senior year in college (when, at the advice of my faculty advisor, I had switched my special field from labor to economic theory). I had become fascinated with the new field of "decision theory," the abstract analysis of decision-making under uncertainty. For my undergraduate degree in economics I had written my senior honors thesis and was later to write a Ph.D. thesis on the question of how to describe and understand, and perhaps to improve, the way people make choices when they are uncertain of the consequences of their actions. That included situations of conflict in which the uncertainty partly pertained to the choices of an adversary, the subject of so-called game theory or bargaining theory.

All this had obvious relevance to military decisions. Partly for that reason, one institution that had shown a special interest in the field was the Rand Corporation in Santa Monica, California, where mathematicians had made basic contributions to it. That in turn attracted my

(others: von Hippel / Jim / Paine / Blair / Sagan / (Kissinger)

attention to Rand, which was founded as a non-profit research organization in 1947 to do both basic research and classified analysis for the Defense Department, mainly the Air Force. I sought and accepted an invitation from RAND's Economics Department to spend the summer of 1958 there during my graduate study at Harvard—after visiting it briefly in the late summer of 1957—initially for intellectual reasons, not out of any sense of nuclear or cold war crisis. My three years in the Marines had left me with respect for the military (especially infantry), interest in strategy, and a greater readiness to apply intellectual concepts to military problems than I would have felt otherwise. Nevertheless, prior to coming to RAND I expected to pursue an academic career as an economic theorist. I was twenty-seven.

As it happened, just after my exploratory visit to Santa Monica in 1957, the Soviets sent Sputnik into orbit, demonstrating an ability to launch ballistic missiles of intercontinental range (ICBMs) earlier than the U.S. could do so. The summer I arrived at Rand in 1958 was the high point of secret intelligence predictions of an imminent vast Soviet superiority in deployed ICBMs, the "missile gap." Even before those predictions, Top Secret RAND studies of the previous four years had concluded that the ability of the Strategic Air Command to retaliate to a Soviet surprise attack well designed to destroy its strategic bombers was very far from reliable. To my new RAND colleagues, the projected Soviet ICBM buildup looked unmistakably like an urgent effort, with a startlingly high chance of success, to acquire the capability to disarm the ability of SAC to retaliate. Such a Soviet capability, and even the costly crash effort to achieve it, destroyed the basis for confidence in nuclear deterrence. At least, it did for anyone reading these studies who shared the widely accepted cold war premise that the Soviets aimed ultimately at world

domination.

Within weeks of my arrival, I found myself immersed in what seemed the most urgent concrete problem of uncertainty and decision that humanity had ever had to face: averting a nuclear exchange between the Soviet Union and the United States. In the last years of the decade, nearly all the departments and individual analysts at RAND were obsessed with solving the single problem of deterring a Soviet nuclear attack on U.S. retaliatory forces and society in the next few years and beyond, by assuring that a U.S. ability to retaliate with nuclear weapons would survive any such attack. The challenge looked both more difficult and more urgent than almost anyone outside RAND seemed able to imagine.

When I entered the Economics Department at Rand as a permanent employee the next summer, I joined this effort wholeheartedly, even with a sense of privilege and dedication, despite my intense personal aversion to nuclear weapons since Hiroshima. In view of my strong feelings against indiscriminate bombing of cities by both sides in World War II, there was a terrible irony to my working for the Air Force on studies aimed at threatening the Russians with the ultimate in terror bombing if they should attack us. But there was a consistent logic to it. I had come to believe, from the Rand analyses, that this was the best, indeed the only, way of increasing the chance that there would be no nuclear war at all in the immediate future.

In the circumstances described by the highest-level national intelligence estimates, the logic of deterrence seemed irrefutable. According to these Top Secret estimates, we faced a powerful enemy making very costly efforts to exploit the potential of nuclear weapons totally to disarm us and to gain unchallenged global dominance. No non-nuclear US military capability

could promise to survive such an attack and respond to it on a scale that would reliably deter an enemy so determined and ruthless. Nothing could do so other than a reliable capability for devastating nuclear retaliation: capability that would assuredly survive a well-designed nuclear first strike, a nuclear Pearl Harbor attack..

For my own contribution, I chose to specialize in a subject that seemed up to this point under-studied in relation to its importance, the command and control of nuclear retaliatory forces by senior military officers and especially by the president. Most of my colleagues were studying the vulnerability, and how to reduce it, of nuclear weapons, bases, and vehicles. I joined some others who were examining the vulnerability and reliability of the military's nervous system. It was widely accepted that the decision whether and when to launch U.S. nuclear forces against the Soviet Union under any circumstances should be made by the president, or highest surviving authority. This concrete problem exemplified and drew on everything I had learned in my graduate study of decision-making under uncertainty. Since the warning and evidence bearing on his decision would inevitably be equivocal, it would be the transcendent, and conceivably the last, decision under uncertainty ever made by a national leader.

But the ability of the president, or even of any high-level commanders, to make this decision wisely or at all was threatened both by their own vulnerability to nuclear attack in Washington and all other command posts, along with that of communications networks and information systems, and by the tendency of these warning and intelligence systems to generate ambiguous signals and false alarms. No military secrets were more tightly guarded than the details of how, by whom, and under what circumstances decisions to execute nuclear war plans would really be arrived at and implemented. A

study of his problems of nuclear command and control called for by the Commander in Chief Pacific, to which I was loaned by RAND, gave me knowledge of some of the most highly-protected and closely held secrets in our military structure, including military plans for general nuclear war, that were generally inaccessible even to the highest civilian authorities. . . .

Sample Excerpts

My friend and Rand Corporation colleague Konrad Kellen once said, "There are certain things which, unless you *must* do them, you must *not* do." Murdering most of the inhabitants of all the major cities in Russia and China seemed to me to be one of those things.

Killing tens or even hundreds of millions of innocent civilians might seem like the kind of thing one must *never* do. But during the Cold War, I and many other men—conscientious people by ordinary standards—had come to believe in good faith that, facing a totalitarian, nuclear-armed enemy determined to achieve world domination, we not only *must* threaten such a possibility as a deterrent, we might also have to carry out the threats out.

In the fall of 1959 I moved to Camp Smith in Honolulu, headquarters of the Commander in Chief Pacific (CINPAC), to join an Office of Naval Research study group on the command and control of nuclear weapons in the Pacific theater. We traveled there to research ways to minimize two risks. The first was the possibility that, in the event of a surprise Soviet nuclear attack, the command and control system throughout the Pacific could be damaged in some way so as to prevent retaliation. The second was the possibility that a commander or even individual pilot might—under circumstances of crisis or perceived crisis, and for entirely patriotic and conscientious reasons— launch a nuclear "retaliation" ~~on a false~~ alarm, without positive orders to do so. In essence, we were addressing both sides of Konrad Kellen's coin: how to avoid Pacific forces failing to launch a nuclear attack when—we felt—they *must* do so, and how to avoid them launching an attack when they *must not* do so. Eventually, in examining these problems, I was in almost every command post and in particular every

underground command post in the Pacific and the U.S.

One challenge to our project faced was that, to a high degree, the two dangers were negatively correlated. Steps which reduced the risk of one tended to increase the risk of the other, and a system which placed priority on minimizing one risk would like opposite from a system which placed priority on minimizing the other. A hypothetical system designed to minimize the risk of taking nuclear action when not necessary would include devices called "Permissive Action Links" (PALs) throughout the chain of command, from top to bottom. These were essentially combination locks which would make it *physically impossible* for any one step of the chain of command to unleash the nuclear forces under its control without having received positive orders from a higher level, originating ultimately from the President. This would not eliminate the risk entirely—the President is still subject to false alarms. But a false alarm is essentially a problem of bad information, and the President has access to the widest array of information, from various sources, and the greatest resources in interpreting that information, so a system in which his finger alone was on the nuclear trigger would be subject that risk much less than any other system.

On first thought, it is hard to imagine why anyone would want to adopt a different system: why should lower-level commanders have the physical ability to launch a nuclear attack without authorization? Wouldn't adoption of such a system imply that, under some circumstances, it might acceptable for a subordinate to launch nuclear weapons—perhaps the weightiest decision possible in the military—without explicit orders to do so?

Surprisingly, many military men, who have devoted their lives to organizations in which order

and discipline are nearly sacred values, would admit—perhaps after some pressing—that, under some circumstances, it was acceptable for a subordinate to launch nuclear forces without direct orders to do so. The military operators I met in the Pacific were aware that there was a very high likelihood, much greater than Presidents and other civilians were likely to realize, that both command authority and communications would be disrupted in a nuclear attack. Most military officers up and down the chain of command were aware that the president himself could easily be killed by a bomb on Washington. It wouldn't even have to be a nuclear bomb, just a terrorist blast. For that matter, even a gunshot, inside or outside the Washington area depending on where the president was, could deprive the chain of its Commander in Chief until civilian succession could be established. But even a small nuclear weapon in Washington could take out nearly all the civilian successors simultaneously, along with the military high command. And a handful of other weapons, a tiny fraction of what would be launched in a major attack, could destroy command posts and communications centers outside Washington.

Furthermore, even if the people inside these command and communications centers should survive, assuring that they could communicate outside after a nuclear attack was difficult. For example, an explosion could destroy the operation of all the radio transmitters inside, even if the human operators survived, just by shaking up all the electronic equipment, apart from more esoteric and intractable electronic and magnetic effects on their functioning. Even bad weather, which effected the radio communications of the day, could paralyze a nuclear retaliatory capability system with PALs.

Military officers controlling our nuclear forces lived with what was for them a nightmare: that in the event of actual enemy attack there was no high likelihood that a retaliatory Execute command

authorized at high levels would ever be sent or would reach the actual operating levels of the nuclear delivery forces. A system of procedures or devices that would make it *physically impossible* for those at lower levels to take nuclear actions on their own in the event of an actual war. Such procedures or systems could lead to the paralysis of our nuclear retaliatory capabilities, their inability to carry out what these officers saw as their most important, virtually sacred mission on which the physical survival of the nation depended, precisely at the moment when it was most needed. The very possibility of this, understood by the enemy, jeopardized deterrence and made this nightmare more likely.

A hypothetical system designed to minimize this risk, in contrast to a system designed instead to minimize the risk of unauthorized launch under crisis or false alarm, would include no physical blocks at any of the steps in the chain of command, so that any subordinate officer, from a theater commander to a region commander center controller, to the commander of an aircraft carrier or airstrip, to an individual pilot, could order the launching of the nuclear forces under his control, without direct authorization to do so.

Furthermore, such a system would include widespread delegation of the authority to do so. If the officer had strong reason to believe that the United States was under nuclear attack, and that the reason he had not yet received an order to retaliate was that the attack had taken out Washington or other command centers so that no order could be sent, or had destroyed communications so that an order that was sent could not get through, he would under those circumstances be authorized legally to launch a retaliation. This system would come as close as possible to assuring some form of retaliation to a nuclear attack. But it also presented nearly inconceivable risk that a nuclear attack would be launched by mistake, because it created thousands more nuclear triggers in the system, and allowed for

so many more (jittery) fingers to be on these triggers.

In my travels in the Pacific as part of this research, I learned that our actual command and control system looked far closer to this latter hypothetical system than to the former one, or to anything in between.

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In 1959 **[name?],** the Nuclear Control Officer on the staff of Admiral Harry D. Felt, Commander in Chief Pacific (CINCPAC) told me that President Eisenhower had given Felt a secret letter, signed by himself, delegating to Felt the authority to execute his nuclear plans on his own initiative if he felt it necessary at a time when communications were out between Washington and his headquarters in Hawaii.

That meant that Admiral Felt had that authority part of every day, because that was how often, on average, communications were out between Washington and Hawaii because of atmospheric disturbances to high frequency radio transmissions.

I didn't ask him if he had actually seen the letter, but he seemed certain that it existed. What he told me, in great secrecy, contradicted the most frequently reiterated and emphatic dogma about the nuclear control system, that there were was no predelegation of authority, that only the president could legitimately make the decision whether or not to go to nuclear war and that he must make that determination personally at the moment of decision.

Yet the practical logic of making such a delegation was clear enough. Without it the Soviets could paralyze any retaliation to a nuclear attack on the U.S. simply be destroying Washington before

the president had given an execute order, or perhaps even before there was any warning at all. In fact, retaliation from the Pacific might be precluded just by atmospheric conditions that prevented an execute message from getting through from Washington.

But the same applied to the problem of relaying an execute order from CINCPAC Headquarters on Oahu to CINCPAC's nuclear forces. Most of these were in "Westpac," the Western Pacific, with the Seventh Fleet carriers or on Korea, Japan, Okinawa, Taiwan or Guam. They were as far from Hawaii as Hawaii was from the continental U.S., and communications from Oahu were just as much subject to storms over the Pacific and other disturbances as radio signals from Washington. On the average, commanders in Westpac were cut off from communications from Hawaii for some part of each day.

Therefore, the CINCPAC Nuclear Control Officer told me, Admiral Felt had made a comparable delegation of authority to his next lower level of command, including the Commander of the Seventh Fleet.

I had the chance to check this **[x months later]** when our study group on nuclear command and control visited the flagship of the Seventh Fleet, steaming in western Pacific waters. After landing by helicopter on the *St. Paul*, we held a meeting with Vice Admiral Kivette, Commander of the Seventh Fleet, and Vice Admiral Eckstrom, Commander of Naval Air in the Pacific.

As recorded in my notes of the two-hour meeting, January 26, 1960, both of them emphasized the importance of the Navy doctrine that actual combat operations must be left to the engaged units acting with relative autonomy, with minimum attempt to control them by higher command. Even in limited war, Kivette said, it wouldn't matter if communications were out between Oahu and the

Seventh Fleet, or even between the Seventh Fleet and the carrier task groups. "Operations would be decentralized, I wouldn't be interfering, unless I had some intelligence they didn't have."

Kivette believed a limited war would remain centralized only so long as political maneuvering predominated, with no shooting, as in the earlier Leganon, Taiwan and Laos crises. The two admirals expected and approved extreme decentralization "as soon as shooting started." Thus, although they expected communications to be disrupted frequently, especially in wartime but even for natural causes, they were both relaxed about the implications of this. They both rejected notions that preplanning could solve problems. One couldn't plan for everything--surprises must be expected. But at the same time, they didn't foresee or desire centralized direction during hostilities, preferring to rely on the judgment of the carrier task group commanders, simply providing them with objectives. And, they stressed, the commander afloat must be given great latitude in interpreting and executing his orders. "You've just got to trust your commander at sea." This applied all the more, they said, to conditions of general nuclear war.

They agreed that it would "nice to know" what Air Force bases had been hit at the outset of a nuclear war or what carriers had been destroyed, but under the conditions of the CINCPAC plan for general nuclear war, "it probably wouldn't matter anyway."

By this time we **[who? You and the Admirals? Your whole team and the commanders?]** seemed to have established some rapport. I hadn't indicated the unease that I was beginning to feel about their seeming indifference to the unreliability of communications in nuclear war, or in a non-nuclear war that could suddenly turn nuclear. I ventured to ask Admiral Kivette if he had heard of a letter from President Eisenhower to Admiral Felt delegating authority over nuclear operations if

communications were out. He said yes, he knew that Admiral Felt held such a letter.

I asked how common it was for his own flagship to be out of communications with Admiral Felt in Hawaii. He said, "Virtually every day, part of the day."

I asked him, what if their own communications with Oahu went out and they thought, for other reasons, that nuclear war might have commenced? To all our earlier questions, one or the other of the two admirals had responded immediately and at length. At this one, Admiral Kivette paused meaningfully, then said to me, "I stand mute."

It was the only question that he didn't answer explicitly, and he drew himself up in his chair rather formally as he said it. But he was smiling, indicating--it seemed to me-- that he assumed I knew the answer to my question, but that this was all he was supposed to say and that he knew that it was, in the context, an answer. Evidently he regarded, or he wanted us to know he was supposed to regard, Admiral Felt's delegation of nuclear authority to him as a more sensitive matter than Eisenhower's delegation to Felt (about which I had already revealed I knew).

After a further pause he added, "Anyway, I just can't believe that we could be cut off from *all* communications; we could get through to someone and he would know what was happening." Admiral Eckstrom added to this, "It would depend on the whole picture. What had been happening up to that moment, how ready are we, are we fueled up, etc." An hour later I raised the question with Admiral Kivette's Nuclear Control Officer. This officer readily told me that, yes, Admiral Felt had delegated to Admiral Kivette the same authority that, he said, President Eisenhower had delegated in writing to Admiral Felt: to launch nuclear weapons at his own initiative during a crisis in case of communications outage.

Pursue this is does (not Rice Archive)

Did she know this?

Compare new info: the letter to "post-attack Cabinet" and Reagan to Cheney + Rumsfeld

If they were right about the letter from the president, this contravened and superseded the guidance in Top Secret war planning that US nuclear attacks could be initiated only by a Presidential decision at the time of the attacks. The general public believed that as well, and believed that the President would never delegate this authority under any circumstances. For once what the public had been told corresponded to the actual secret guidance written into war plans. Yet written authorizations by even higher authority directly contradicted this guidance, according to the three officers and eventually others who spoke to me.

Moreover, the information from both Nuclear Control Officers that CINCPAC had on his own authority made such a delegation to the Seventh Fleet Commander (and perhaps others) meant to me that the *belief* that Eisenhower had himself formally given such authorization to CINCPAC had consequences, whether that belief was true or not.

It was clear from Nuclear Control Officers' manner in telling me this that they were telling me something of the highest sensitivity. I refrained from asking whether they were aware of even further delegations to officers still lower in the chain of command.

In light of the broadly and firmly held understanding that authority to initiate nuclear war rested exclusively with the President, such delegations would have looked questionable or even gravely illegal to the recipients, had not shared a secret belief that the President himself had chosen to make such a delegation to theater commanders. But given that belief--and I found it widely held in the Pacific--it was clear that the same incentives that influenced the President existed for further delegations by lower commanders.

Each level of command had reason to worry that during a crisis an outage of communications

due to atmospheric or technical difficulties or an enemy attack on that command headquarters could paralyze the nuclear capabilities of subordinate units, unless they'd been delegated authority to act under such conditions as, they believed, CINCPAC had been by the President. Indeed, CINCPAC would logically infer that he could not reliably carry out the intention of the President with respect to the actions of his theater nuclear capability in the event that Washington was attacked or out of communication unless he provided explicitly for the possibility--the likelihood--that he himself would also be attacked, or might be out of communications for other, quite ordinary reasons, with his subordinate commands. He could provide for that only in the same way that President Eisenhower had, namely by allowing lower commanders to exercise their own judgment in those circumstances. The two admirals found this sub-delegation totally compatible, even obligatory, in terms of naval traditions anyway. But in this situation the logic that applied to the Navy and to CINCPAC applied as well to all the other unified and specified commanders to whom the President had delegated **[you don't mention anything about the president delegating to this commanders yet]**: the CINCS in Europe, Alaska, the Mediterranean, the Atlantic, and the Strategic Air Command, as well as NORAD.

Unless the President forbade such further delegation explicitly (and perhaps even if he did) the example of his own delegation to CINCPAC and other theater commanders seemed likely to be imitated, not only in the Pacific but in other theaters around the world. And it was implicit in what these officers told me that the President had *not* explicitly forbidden these theater commanders to delegate that authority any further in the manner that CINCPAC had sub-delegated within the Seventh Fleet.

Nevertheless, it seemed questionable to me that the President would have wanted any further

delegations, or that he even knew they existed. His own action of delegation, assuming these letters really existed, distributed the authority to just six or seven three- or four-star generals and admirals. Further delegations not only multiplied the number of individuals with authority, under some conditions, to initiate nuclear war, but it drew into that circle officers of progressively lower rank, lesser experience and maturity and narrower responsibilities and access to information.

At some point, as one moved down the chain of command, the advantages of further assuring a retaliatory response would be outweighed--from a national point of view--by the increased risks of a wrong response. Not only were the risks progressively greater, but from the President's perspective, the need or incentive for subsequent delegations was progressively smaller, involving smaller portions of the overall retaliatory forces.

But it wouldn't look that way to a commander at the lower level, whose mission understandably seemed to him to have transcendent importance if it involved any nuclear weapons at all. He would want to be sure that the weapons under him took part in the big game, rather than sitting out a general nuclear war just because he himself had been put out of play or cut off because of inclement weather. If you left the decision as to whether to delegate further to each successive layer of command, it was likely to go down to the bottom. In the limit, every flight commander, if not every pilot with a weapon aboard, would feel *authorized*, under some circumstances, to arm and launch his weapons.

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The delegations and subdelegations I heard about in my travels in the Pacific were—if they

existed at all—of the highest secrecy and sensitivity. Nonetheless, before I even joined the study group, I had heard of another kind of limited delegation, one which did not appear—at first—to be as risky.

My Rand colleague Albert Wohlstetter took credit for originating the "positive control" process, as a partial answer to the problem of false alarms and poor information. **[When did you learn about this process? At RAND? In Honolulu?]** This created a "launch on warning" option with respect to bombers that was separable from the decision to execute the war plans, i.e., to send the bombers to target. This made it appear safe enough to launch planes, in order to protect them from being destroyed on the ground by enemy attack, to delegate authority to do this to base commanders or higher military authorities below the level of the president.

According to the Top Secret war plans, any order to "Execute" a nuclear war plan had to be based on an immediate, explicit order from higher authority, ultimately from the President himself. (As we have seen, Presidential directives authorizing delegation of that power could override such Top Secret plans. As I learned in the Pacific, many people believed that such directives existed, a belief that—whether true or not—had far-reaching consequences in terms of subordinate's willingness to initiate nuclear attack without a direct order.)

But there were provisions in the plans for taking various preparatory actions on local authority, and even for launching planes on warning of imminent enemy attack, to protect them from destruction. Such a launch was not supposed to be tantamount to a decision to "Execute," i.e., to proceed to targets.

It would be under "positive control," which meant that the planes were to proceed to a predesignated rendezvous area, where they would circle till they got an explicit, "positive" order either

to "Execute," i.e., to proceed to targets, or to return to the base. If they got no order at all, they were to return to their base, at the point when they had just enough fuel to do that safely.

This procedure was also known as "fail-safe." Thus if there were a failure in transmission from the base, a failure to transmit an intended signal either to go ahead or to return, the planes were to act as if they had gotten a message to return. This response might be an error if there was actually a war on, but a "safer" error than the mistake of going to target when there was no war on.

The purpose of the positive control procedure was to give force commanders the delegated authority to get their planes into the air so they wouldn't be destroyed on the ground, *without* giving them authority to initiate a nuclear attack. It separated, both formally and practically, the order to launch from an order to attack.

The term "positive control" or its synonym, "fail-safe procedure," meant that the pilots were to be trained and drilled to understand that they were never to go to target under any circumstances without a positive and authenticated order, explicit and immediate, from higher authority to do so.

They were not to assume that that was desired or appropriate under any circumstances if they had not been told specifically at the time to do it. And that order had to be "authenticated" as coming from the highest authorities, i.e., it had to be accompanied by coded evidence and to come in a manner that made its origins at highest levels unmistakably clear.

The were *not* to assume that a launch order amounted to an execute order, or that it would certainly be followed by an execute order, even if it came under circumstances when an enemy attack was expected.

The question I chose to address was, how reliably would their behavior conform to these

instructions? I knew from my own experience in a highly disciplined organization, the Marine Corps, and from my reading of military history, that their actual beliefs would not depend only on what they had been told to assume or not to assume but on their actual experience. And their behavior would reflect to some extent their actual beliefs, not just what they had been told to do under prescribed assumptions.

Discipline, even, perhaps especially, in an elite outfit, didn't guarantee robotic, rote-like performance. Contrary to popular belief, it wasn't meant to. At least, that was what I had learned in the Marines, not only from my own gut experience but from those officers and men I had met or read about that I most respected.

Thus, to take a naval example, a helmsman or officer of the deck on the bridge of a ship, whose captain is asleep in his bunk, may suddenly perceive that the ship is about to run aground or to hit another ship if he continues to carry out his standing orders or the last instructions he received.

He can continue to carry out those orders, or he can try to wake the captain or to get a decision from some intermediate authority, or he can take an initiative to avert the collision that violates his current orders. If he takes the initiative, he will probably be investigated for insubordination and he might be punished, even if he does save the ship. But he might feel that that was the right thing to do even if he were punished for it.[1]

Some of them, including some of the most loyal, dedicated, obedient among them, will do not what the letter of their orders demand but what they believe their leaders would want them to do if they shared their subordinates' knowledge about the actual local circumstances and if they could reach a decision and communicate it to the subordinates in time to take appropriate action.

Such "ifs" reflect an understanding of operational realities that some without experience inside large and farflung bureaucracies may not appreciate. Messages take time to travel, often an unpredictably long time even when they are assigned the highest priority and individual parts of the journey are at the speed of light. In large organizations they go through several stages before they reach their intended audience; each of these stages occupies time and introduces a chance of error in transmission and a chance that the messsage will be totally misrouted or aborted so that it never gets through.

If and when a query or warning from a subordinate does get through, it competes with many other messsages from others for the superior's attention. If it does get some attention, its import and urgency may or may not be comprehended. Time is needed for a decision; and the decision, communicated back to the subordinate, goes through similar delays and possible errors. And atmospheric conditions or enemy action might block transmission altogether.

When we see the light of a distant star, we know (at least, an astronomer does) that the star itself may have ceased to exist years ago, while its light was travelling to us. And when the order of a distant commander arrives in the field, an experienced field officer knows that it reflects the understanding of the higher commander and his staff of the local situation as it was some time ago, or as it was then expected to be at the moment the order is received.

The actual situation at this moment may be entirely different from what it was or was expected to be. Of course, the order will also reflect information available to the higher commander and various considerations that the subordinate doesn't share. Knowing this, the conscientious field officer in a situation where the order looks highly inappropriate for reasons that the high command probably

doesn't yet know must at least ask himself, "What would my commander want me to do if he was here at this moment?"

If there seems to be time and capability, the field officer may send back a query, a warning, an updating on local conditions, up through channels to his superior, even if he knows that this questioning of his orders is likely to be perceived negatively, as troublesome or insubordinate or incompetent. It might even be against a standing rule. (A nuclear "Execute" order was supposed to be obeyed instantly without eliciting queries that might clog communications channels. In practice, the first "Execute" order since Nagasaki, 1945, was likely to evoke a back-tide of requests for corroboration.) That is one of his real options. But there might not seem time for it, given local conditions and given the sense of urgency conveyed by the order itself to do something appropriate.

Likewise, the lack of a positive order to execute, following an order to launch that was accompanied or followed by strong signs of an enemy attack, will be ambiguous. It may mean that a return to base is desired. It is certainly supposed, according to the written rules, to be responded to eventually as if it surely meant that.

Nevertheless, it may mean that an order to execute has been sent but has not arrived yet, and may not arrive in time for it to be carried out with remaining fuel. Or that it would have been sent and received had not enemy nuclear attacks wiped out the commander or the transmitter or interfered with the transmission.

It could, in other words, be a very ominous indication, depending on what other evidence is available. For example, how often had they had the experience of getting to this point, of circling in a rendezvous area, without getting a message to return and without, as it turned out, their base having

been under attack?

If the whole procedure were practiced often enough up to this point, the pilots would come to expect on any given occasion, in the absence of any other evidence, that they were taking part in a drill. And they would have acquired a habit of returning. They wouldn't feel any pressure to break that habit, to disobey their standing orders and to take off for their targets, even if they got no further orders. They would return to their base routinely.

But our CINCPAC study group found on our field investigations that it was not at all clear that most pilots in the Pacific got a chance to acquire such a habit. The first part of the procedure was practiced very frequently, in fact daily, at random times, up to the point where planes were ready to taxi for takeoff. We actually witnessed this on our visit to Kadena Airfield on Okinawa. [At some point this story is to be told]. That was to assure that the planes would be ready to take off in time when ordered. At that, practice had made them perfect.

But the later part of the procedure, to assure that they would come back from their rendezvous area unless they were ordered to proceed, was much more time-consuming and expensive in fuel and maintenance, and it was clearly practiced much less often. We asked, was it ever rehearsed at all? Answers on that were vague and conflicting. It was understood that SAC, which had invented this procedure, did do full-scale rehearsals of it frequently, but it was not clear that theater forces ever did.

In fact, we learned at Kadena that the tactical alert planes there never actually left the ground in their daily drills, and that wasn't just for reasons of expense. They were barred even from taxiing from their alert pads to the point of takeoff. The reason, we were told, was the danger of accident, possibly a nuclear accident.

Each of the alert planes, single-person F-100's, was carrying an underslung nuclear weapon outside the plane, beneath the undercarriage. Many of these weapons, we were told, were of a type that were shortly to become obsolete. They were not "sealed pit." They were designed to carried inside a plane, for greater safety; but there was no room for that in these tactical fighter-bombers.

Moreover, they were not "three-point safe." These H-bombs, thermonuclear fusion weapons, were triggered by a plutonium bomb of the type that destroyed Nagasaki. The plutonium core was surrounded by a spherical web of shaped-charges of high explosive. When these all detonated simultaneously, they "imploded" the plutonium core inside, squeezing it to a density that gave it greater than critical mass, leading to a nuclear fission explosion that in turn triggered the thermonuclear fuel.

"Three-point safe" meant that the design ensured that if one, two or as many as three of the high-explosive shaped-charge sections exploded accidentally, no significant nuclear yield would result. Only if more than three went off--from being dropped, burned, fired into, or from an electrical malfunction--might there be a partial nuclear explosion or a possible full yield.[2]

Since these weapons were not three-point safe--they may not have been one-point safe--there was a danger that if they were dropped, or involved in a crash or fire or explosion, one or two sections of the high explosive might go off and that might be enough to cause a partical or total nuclear explosion. While the probability of this was small, the risk was worth taking in a practice drill, which after all happened once a day.

Therefore, in these practice alerts, the pilots would jump into their planes and gun up the engines. But they didn't go to the point of racing down the runway, or even taxiing over to the runway from their pads, let alone take off. They didn't do this precisely because of the risk of an accident in

which there would be at least a high explosive yield and possibly a partial nuclear explosion. This might happen if a plane heeled over and crashed, or two planes crashed into each other, while taxiing or accelerating.

The pilots, of course, often flew their planes without weapons, when they were not on alert. And apparently they also did training missions with actual weapons. But we found it very hard to get a clear answer whether pilots on actual standby alert ever took off, in a practice drill, from their alert pads with weapons aboard. Certainly not very often, if ever. Probably never.

That said to me that if they ever were ordered to take off from those pads, it would be an extraordinary, perhaps unprecedented, experience for the alert pilots. Even if it was in fact, unknown to them, only a drill, the first time (or two) that it happened would almost lead them to infer that "this was it," an enemy attack was underway or else they were leading a preemptive strike. At the very least, they would have to infer that the indications of enemy were more serious than they ever had been before. It would be in that state of mind that they would head for their rendezvous areas, even if they received no "Execute" order to follow their "Launch" order. . . .

This particular consequence of the lack of regular rehearsal of take-off under fully realistic simulated alert conditions didn't seem familiar to any of the nuclear control officers or pilots that I questioned. They all seemed to hear my reasoning as new, interesting and plausible. That was worrisome. They agreed: the first time, even the first few times, that alert pilots found themselves circling in a rendezvous area with bombs aboard waiting for an "Execute" or a "Return" message, they would be strongly inclined to expect the first, simply because it was the first time they had ever gotten that far.

They would believe the war was on, or was imminent, because the commanders who had launched them unprecedently would appear to have thought so.

What if they had other reason to think that, as well? Suppose this launch came in a time of international crisis, either in the region or elsewhere in the world. Suppose there had been earlier "strategic warning" of heightened danger of war, or of attack. What if there were an actual war going on in the area, between China and Taiwan, or in Korea, or Indochina.

What if there were, in the course of the launch or soon after it, a nuclear explosion on an American airbase in the region, perhaps on this very base? On first thought, that might seem improbably coincidental, stretching too far for a "worst case." On second thought, not at all. (As far as I could tell from many conversations, no one else in the area had had the first thought, let alone the second. No one found it implausible after a brief discussion).

It was only necessary to recall why the alert F-100s, despite a command obsession with realistic drills and with meeting standards, rarely if ever rehearsed to the point of take-off. It was precisely because of the serious danger of a crash and its possible nuclear consequences, with these particular bombloads. The other side of that reluctance, the very basis for it, was an estimate by commanders that that if a number of these planes actually taxied to the runway and took off in a great rush, one or more of them might bump into another or otherwise turn over, burn and explode, and produce a nuclear fireball.

That possibility itself wasn't remote from people's thoughts. It was why they didn't taxi. What they hadn't thought about was the next question. What would the effect of that event be on the minds of the alert pilots who had already taken off, either from that base, or from another one nearby, or even

from a distant base in the same region?

They might, of course, guess at the true reason, that an unprecedented accident had occurred. But even if that occurred to them at all, it would be competing with another explanation, which might seem much more likely under the circumstances. After all, why were they in the air at all, with their bombs aboard? A realistic, no-warning drill, for the first time, despite the risks? Or because higher authority had perceived evidence of an imminent enemy attack, stronger than ever before, perhaps certain? And now this explosion! The attack would appear to be taking place.

At this point a lot of communications would be taking place among the airborne planes and they would be attempting to communicate back to their base. But if there had been a partial nuclear explosion at that base, that would be impossible. The blast itself would probably have destroyed all transmitting points at the base, but beyond that the electronic effects of the explosion would disrupt all high frequency communications in a considerable area.

That would mean that the last signal that these planes would receive from their base, and perhaps, for quite a while, from any other bases in their vicinity, would be the sight of a mushroom cloud rising over the runway they had just left. They would then be out of communications locally. The later lack of an "Execute" or "Return" order, or any other, would have an easy explanation, and it wouldn't be routine. All this in the context of the fact that they had just received a "Launch" order that was unprecedented, or nearly so, a circumstance that in itself would make some or all of them nearly certain that an attack was imminent.

What this meant to me was that a false alarm so serious as to cause a "Launch" command to alert tactical forces in the Pacific (and probably anywhere in the world, at least where the weapons

carried were such as to preclude frequent rehearsals of launch) was likely to generate the belief in the minds of some airborne pilots armed with megaton weapons that, although they had not received an execute order, general nuclear war was underway, and that they had no ability to receive an execute order because communications had been disrupted by the war.

Moreover, a "Launch" order could be followed closely by a nuclear explosion on a US base, precisely because it would lead to the actual launching of numbers of planes with nuclear weapons that were known to be less than maximally safe. In fact, these probabilities, individually low but not independent, could cascade even further.

If the false alarm leading to precautionary launch was widespread in the theater or even worldwide, the numbers of bases and planes involved would greatly increase the chance of an accidental explosion somewhere. But even if the initial takeoffs were at the initiative of a single base commander, a large explosion (even with high explosive alone; the cause and nature would be ambiguous for a time) and especially a nuclear explosion would lead to many precautionary launches elsewhere, likewise increasing the chances of a second explosion. And any of these would simultaneously disrupt communications.

My knowledge of military interpretation of orders and military dedication, from my own experience in the Marines and, by now, a couple of years talking with high-level staff officers, convinced me that in that situation many of the pilots would regard their duty as being to carry out their mission, their general war mission, in violation of the strict letter of their orders to await a positive authorization. The authorization would be unlikely to be forthcoming, they would suddenly realize, if an enemy attack had intervened soon after their launch orders.

Thus, without the commander contemplating a precautionary launch realizing it, and despite the positive control procedures in force, his command to launch might be tantamount to an execute order after all.

When I tried out this line of reasoning to experienced staff officers at various command posts and bases in the Pacific, nothing I heard back was reassuring. They found it unfamiliar and immediately plausible. No one came up with some operational characteristic or practice I had left out that lowered the odds of the disastrous sequence I was projecting.[3]

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I felt I needed to test out these thoughts at the lowest level of command. Looking at a map at headquarters in Japan, I picked out a small airbase in Korea, Kunsan, the northernmost base with nuclear alert planes in Korea, i.e., in the Pacific. In fact, its alert planes with nuclear weapons may have been closer to Communist territory than any others in the world. Our group could get rides on military planes and we had a kind of "go anywhere, talk to anyone, see anything" clearance. On short notice, I decided to take a trip to Korea to talk to the officer in charge at Kunsan.

I landed in Seoul and got myself a ride on a light plane over barren, unpopulated hills up to Kunsan. I found myself in something like a little town in a frontier western, with a dusty airstrip. The officer in charge of the base was an Air Force major. He was in command of twelve F-100s, each with an underslung Mark-28 thermonuclear weapon with a yield of 1.1 megatons.

One of those bombs had the explosive equivalent of half the tonnage the US dropped in World War II. The major in charge of this little collection of Quonset huts and planes in the hills controlled

six and a half World War II's worth of firepower.

As at Kadena, they weren't sealed pit weapons, not three-point safe. They didn't practice taxiing or taking off in drills with weapons aboard. A portion of this squadron was on alert at all times. In fact, my memory is that all twelve were, which would imply that they had multiple crews, but it might have been just four or six.

We were just minutes of flying time away from North Korea, but these planes were targeted on northeast Russia, just a few minutes further. I asked the major how long it would be, if they took off toward their rendezvous area, before they would be picked up on North Korean or Russian radar, and how long before they were out of line-of-sight communication with their base. He got edgy, said these were very sensitive questions, and refused to answer unless he "saw my authorization."

After he did this a couple of times I got irritated and said, "Well, we'll just have to call Japan and let you talk to someone." We went into his command hut and he tried to get headquarters in Japan by radio. This brought out the interesting fact that he was out of communications with Japan, and had been for the last couple of hours. He couldn't get through to Japan via the main headquarters in Korea at Osan, either. I asked him how often this happened and he said that "about once a day" atmospheric troubles of different kinds put him out of touch with Japan.

I didn't think it was worth pursuing our discussion till he'd talked to the Operations desk in Japan about my access, so I waited for almost an hour, reading magazines in his hut. Osan had an alert strip too, where I'd had some discussions before I flew up to Kunsan. It occurred to me that if there were a nuclear explosion there for the reasons I was exploring, Kunsan could be cut off from communications with the rest of the world.

Finally he got through to Japan and got the word that he could tell me "anything." He asked me to run my questions by him again. I did, and he shook his head and said calmly that he didn't know the answers.

It was a funny follow-up to his expressed concern about security that had delayed us for the last hour. I asked myself if he was kidding me now, but he seemed sincere and I let it pass. And from then on he got quite communicative. He hadn't run into any researchers before at Kunsan and he seemed to enjoy speculating about the issues I was raising.

Because this base was so close to Communist radar, I'd been told at Osan, the base commander at Kunsan didn't have the normal authority to launch his planes at his own initiative, even as a precaution against attack, on positive control. He wasn't to launch them at all, under any circumstances, except on direct order from higher headquarters via Tokyo, possibly relayed through Osan. I wanted to hear him reiterate that, then go on to test him on some hypothetical circumstances. It didn't come out that way.

I asked if there were any circumstances when he would send his planes onto alert in the air, for example if he thought they were about to be attacked. The major said, "Well, you know when I'm supposed to do it, don't you?" He seemed to be testing me, what I knew.

I said, "Yes, only when you get an order from Japan or Osan."

He said, "That's right." Without any break he went on to say, "But let me tell you, I'm the commander of this base, and every comander has an inherent right to protect his forces. That is a fundamental law of war. It's the oldest principle of war that as a military commander I have the right and authority to protect my forces and if I believed that they were endangered by anything, I would

send them off."

I couldn't figure why he was telling me this, why he seemed to want to put it on the record. We had just established that I was there investigating nuclear command and control for the Commander in Chief Pacific, Admiral Felt, and he was telling me in the most matter of fact way that he felt empowered by fundamental principles to violate very specific and explicit directives sent down by CINCPAC.

It was hardly a surprise to me that a field commander might come to feel like that under some circumstances. That was the intuition that had brought me to Korea. But I didn't expect that he had already thought it out, or that he was so ready to tell me right out that he didn't feel bound by his orders from the headquarters I came from.

Those orders, after all, weren't just arbitrary. They were specific to Kunsan precisely because of the closeness to enemy territory and radar. A sudden mass takeoff might be detected and interpreted by the Communists as a warning of imminent attack. (In fact, in view of what the major was about to tell me, the enemy wouldn't be very foolish to think that). So there was strong reason to keep his planes tightly under higher control, whether or not the major thought that violated principles of war.

I didn't react. I wanted to explore what conditions might lead him to launch his planes. I asked him how he would interpret a sudden outage of communication that came during an intense crisis. He said yes, that might well lead him to get his planes off the ground without orders from above.

Again, that wasn't a surprise in itself, or wouldn't have been on some other base, where it didn't imply any violation of their directives. This was so even though in that era outage of communications

from natural disturbances was a fairly frequent phenomenon. Atmospheric disturbances disrupting high frequency communications occurred virtually every day in the Pacific.

Even underwater cables to Japan had recently been cut accidentally by trawlers. During an actual crisis, all communications between NORAD and our Ballistic Missile Early Warning System (BMEWS) had gone out at the same time, because, as I recalled, a forest fire destroyed one set of landlines on one side of the continent and an earlier earthquake had destroyed the lines on the other.

Nevertheless, commanders and staff officers had told me that they would regard a sudden disruption of communications during a crisis as a very ominous sign, requiring at the least a high level of alert and perhaps a launch of some planes. So the major wasn't answering differently from other bases. He just wasn't acknowledging that his different directives would slow him down.

How about a report of a nuclear explosion, somewhere else in the western Pacific? Yes, that would be more than sufficient. He wouldn't wait for an order.

Now the big question, what would the effect of these alerting measures be? I asked him what he thought would happen if he ordered the planes off.

He said, "Well, you know what the orders are. They go to a rendezvous area and fly around, waiting for further orders. They can do that for about an hour, and still have enough fuel to get to their targets or to come back. If they don't get an execute message, they're supposed to come back. Those are their orders."

They would be out of communications with the base at their rendezvous area, he'd told me earlier. If they were there as part of a theater-wide alert, there would be a coordinating plane with them at the rendezvous with stronger communications gear, sent from another base. But if he had sent

them up himself, they would be circling up there by themselves, unable to send any messages out.

I asked, "How do you think that would work?"

The major said, "If they didn't get any execute message? Oh, I think they'd come back." Pause. "Most of them."

The last three words didn't register with me right away because before they were out of his mouth my head was exploding. I kept my face blank but I was screaming to myself inside, "Think? You think they'd come back?!"

This was their commander, I was thinking, the one who gave them their orders, the man in charge of their training and discipline.

He added, "Of course, if one of them were to break out of that circle and go for his target, I think the rest would follow. And they might as well. If one goes, they might as well all go. I tell them not to do it, though."

I continued to keep a blank face. I had a few more questions to ask. Wasn't it true that there was a chance that these Mark-28 weapons underneath the planes had some risk of a partial nuclear explosion if they were in an accident on the runway? He nodded. I set the scene. What if the first five pilots to take off were to look back and see a mushroom cloud over the base, after the sixth plane exploded on the runway? What would they think, what would they do, after they felt the blast wave?

His first response was indirect. "Well, of course it's not like Okinawa, where that would mean to the pilots that their families had just been destroyed." He meant, it turned out, that the likelihood that pilots would disobey their instructions and go on to target without explicit orders would turn on who had been killed in that explosion, as much as whether they thought it was an accident or an attack.

On Okinawa, where some of them had dependents stationed on the base, "they'd go on, of course," if a blast wiped out their families. After all, they couldn't be sure it was an accident. On Kunsan, if the pilots in the air realized that they'd lost the major and the base but they weren't sure it was an enemy attack, they might look for a recovery base and come back, if they didn't get a go-ahead order.

After he had made this distinction, I reminded him that the premise of the question was that pilots had been launched on alert for the first time ever, whether by Tokyo/Osan or by the major. With that in mind, and all the more if this had arisen out of a crisis, he agreed that a nuclear explosion on Kunsan, or for that matter a report of one on Osan or Kadena, would make his pilots certain that an attack was underway. Communications would be out, so they couldn't get an order to return. They would go on to their targets.

[Did you ask him about Eisenhower delegation letter? If so, describe his answer.]

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That attitude of wanting certainty that weapons under one's own command to come into play during a war came out not only in connection with delegation but, even more sharply, on the question of what targets and countries would be subject to nuclear strikes. By far the strongest reaction to any question we raised with the two admirals came when I mentioned as a possibility a decision by the President to go to war against the Soviet Union alone, not against China. Because of range limitations, almost no Russian targets lay within their reach, except for a few in the Vladivostok

and Siberian area. If higher authorities ordered war against only Russia, once CINPAC forces destroyed Vladivostok and a few other minor targets in Eastern Russia, they would essentially have to sit out the war—"on the sidelines," as they thought of it. When I asked this question, both of the admirals drew back and seemed to go genuinely into shock. Admiral Kivette said, "I would hope, that's out of the question!"

I repeated the question: "But suppose that an order did come from the JCS to execute war plans against the Soviet Union only. How would you respond to it, and how long would it take you?" There was a long silence in which it appeared that Admiral Eckstrom was almost holding back vomit. Then he said, enunciating each word separately, almost gasping, in pained incredulity, "You have. . . to assume. . . some. . . modicum . . . of rationality. . . in higher authority. . . that they would not do something. . . so insane. . . as to go to war. . . against one Communist power. . . while letting the other one off. . . scot-free." I couldn't tell whether the extreme, red-faced reaction we were observing to this prospect was because I was rubbing an old and very sensitive sore, or because such a nightmare had really never occurred to them before.

When our group began our study, we needed to familiarize ourselves with the planning for nuclear operations in the Pacific. Once we landed in Honolulu, we requested access to the general war plans and to various other documents within the CINCPAC command, and **[x person]** granted us this access. Specifically, we asked for and were given permission to have access to the Top Secret "cage" in the Plans Section of CINCPAC Headquarters, so that we could work late at night and on Sundays, since they were not willing to let us sign these documents out to our offices. This was literally a cage covered by heavy wire netting, guarded by

a warrant officer and another guard who was also a librarian. Inside, the cage was the size of a small library room, with many shelves of documents and a filing system.

In the course of reading the current nuclear plans, I began to look up their references to various other documents, and thus became gradually aware of the structure of plans. It turned out that CINCPAC got most of the JCS documents, which were sent routinely to the CINPAC, so one could see plans that related to other theaters as well, and higher level plans. I compiled a list of several hundred documents that looked interesting, and—in my efforts to educate myself on the Command and Control problems of CINCPAC—ended up spending days, nights and weekends poring over these. They gave me essentially any document I wanted to see, and I saw them relating to a great variety of areas.

Ultimately, in order to understand the theory of the plan, the strategy and the way it was likely to be implemented, I read the entire structure of plans relating to nuclear war for the Pacific. This entailed starting with the GEOP (General Emergency Operations Plan), which was up-dated yearly and comprised the basis of the CINCPAC Plan. Below this were the component plans of the Army, Navy and Air Force, the USAPPAC **(?)** , and the CINCPAC Fleet PACAF **(?)**. Below these were, in the case of the Air Force case, a Seventh Air Force plan, going down to Air Division **(what's this?)** , then finally plans relating to an individual squadron. In the Navy the plans went down to the CINCPAC Fleet, continuing down to the Seventh Fleet, and ultimately to carrier division **[what's this?]** and individual carriers and pilots. In the Army, there were subordinate unified commands, in which a particular commander would control the fleet services in a particular area, going down ultimately to the plan for divisions and battalions. In addition,

there was the Taiwan Defense Command **[what's this?]** and the Korean Command, which also included the U.N. Command, called CINCUNC **(?)** or COMUSK (Commander of U.S. Forces, Korea). I read all of the higher-level plans within this hierarchy, and a significant sample of the lower-level and bottom-level plans—in many cases, following a particular service line down, seven or eight levels of plans with increasing specificity and decreasing geographical coverage of targets and units involved.

These subplans did not flow from the Pentagon, or even from the next highest level of authority for each plan; rather, each level devised its own plans, based on the objectives and strategies outlined in the next higher plan, then submitted these plans for review to higher levels. Nonetheless, the plans used overlapping language, in an effort to emphasize the unitary nature of the overall plans. Each one started by stating that it was based on the plan of the next highest authority in the chain of command. Thus, the Seventh Fleet plan stated "This plan is based on plan x of the Pacific Command," the Pacific command said, "This plan is based on plan y of the of the Joint Chiefs of Staff," and so forth, up the chain of command, and down to plans made by individual aircraft carriers and airstrips.

In reading these plans, I began to notice discrepancies between plans just three or four levels apart. I questioned people experienced in the process about this—many of these planners had worked in Washington in the JCS—and learned that *no* agency throughout reviewed more than two or three levels, or at the most, four. Due to secrecy regulations, as well as the bureaucratic division of labor, each level of planning involved looking only at the higher level of plan from which the lower level plan was meant to derive, and at the next lower level of plan, to

ensure that it met the specifications of the present-level plan; typically, a planner would be aware of three levels of the plan, and at the most four, even though there were often seven or eight levels of planning.

The effects of this lack of over all review, I discovered as I read plans from all the levels, and later as I visited command centers, aircraft carriers, and airstrips throughout the pacific, were astounding discrepancies if one compared plans several levels apart. Changes that would appear subtle from one plan to the next, from one level to the next, in wording of objectives or in the assignment of tasks, would be magnified as they went down several levels. Thus, if one compared just four levels apart, the task that a carrier division or even the Seventh Fleet might find itself assigned by its planners and commander would be markedly different from the task envisioned for that area at the level of CINCPAC or the JCS.

Furthermore, there was no reason to believe that higher level commanders were aware of these discrepancies, nor, for that matter, people at the lower level. No one, it appeared, was aware of them, because few people had access to more than a couple levels of nuclear war planning, and those that did didn't take the time to review far lower level plans—they left that task to lower-level commanders (who often didn't have access to the higher level plans.)

What were these discrepancies? In a later briefing I gave to RAND, based on my research, which I wrote up in a top-secret paper called "The Pac-Com Response to an Emergency Message," I was able to show that the effect of ordering a nuclear attack on military targets in Russia would be that the Pacific Command would also destroy every city in China.

At the highest level of nuclear planning, provision was made—in principle—for conflicts that involved only Russia. **[More detail here. Provisions where? In which plans? Make it more clear that the highest levels really did believe it would be possible to hit Russia without hitting China. Did these plans specifically call for the development of subplans that would target only Russia? If so, doesn't that mean that the lower levels abrogated their duties to develop those plans? If not, is that a pretty MAJOR oversight of these higher level plans? Explain.]** But, in that cage in Honolulu, and in my later travels throughout the command and control system in the Pacific, I discovered that the Pacific forces, from top to bottom, were focused on a conflict with China, and that no provision for fighting only Russia was made either in plan or in practice in any area of Pacific operations. This omission was reflected in writing, it was reflected in the way training was conducted and weapons were allocated, but also in the attitude of all of the commanders and officers involved.

From the point of view of CINPAC nuclear planners, who were interpreting higher-level nuclear plans in making their own theater-level plans, there was a very strong incentive on planners' part to assume—and they did assume—that under any circumstances under which you were fighting Russia, you would also want to annihilate their communist partners, the Chinese. Yet by 1960, it was becoming very evident that for some time there had been a split between the Chinese and the Soviets, which arose in particular out of the Russian refusal in 1958 to provide nuclear weapons to the Chinese, and their removal of nuclear technicians for China, during the Taiwan Straits crisis. Since the war might likely start over an event in Europe—fighting between East and West Germany, or a Russian invasion of Yugoslavia, or conceivably a Russian invasion

of Iran—it wasn't obvious to me at first, as I read the plans, why we would be annihilating the Chinese as well.

In many operations and plan centers and command posts in the command posts in Okinawa, Formosa, Guam, Tokyo, and on several carriers and command ships in the Pacific which I visited, there would be a large map showing nuclear targets. It would be their most secret map, usually covered by a screen or a curtain drawn over it when other people who did not have authorization were being briefed in the room. Those maps, typically, did not demarcate between China and Russia. The Sino-Soviet bloc appeared as one giant landmass, with arrows and pins indicating the various targets; you could not tell simply by inspecting the pins whether they were in China or Russia. In some maps, a piece of colored string indicating roughly the boundary of Russia and China had been pinned in, but this yarn was a rough guideline only.

This meant that a high level planner in that division, faced with orders to strike one country but not the other, could not, just by inspecting those targets, decide which ones to pull. In fact, I learned, doing so would be an extremely laborious process. The computer programs listed tail number—which was the way airplanes were designated—assigned to particular coordinates, but they did not list the *countries* along with the coordinates. Sorting out which coordinate was in which country could not be done in minutes or hours; it would probably take days or weeks.

Finally, on the actual runways in Guam or Okinawa or Korea and on carriers, which I visited [narrative here—describe some of these visits], planes were targeted in a fashion on the alert runway—ready to take off on ten minutes alert—such that one plane with a 1.1 megaton

bomb slung under it was targeted for the Vladivostok area, and a plane next to it on the runway, which would be taking off at a few seconds interval, was targeted and trained and briefed and practiced for a target in China. Thus, the planes within a ten-man alert section on a given runway would be entirely scrambled in terms of their national targets, and they practiced their drills—which involved complex timing between the different take-offs, to all launch in the same routine; there was no routine for only the Chinese-targeted planes to launch, or only the Russian-targeted planes.

Furthermore, the pilots generally *did not know* which country they were targeting; the targeting was handled by the crew by the same IBM computer system, which did not identify whether the target would hit China or Russia, providing only coordinates instead. Thus, there was no way, either manually or in the computer programs, to quickly unscramble the targets and assure that—for example, only planes 7, 6 and 11, which were targeted for Russia, should take off out of that alert force.

All of these factors combined to create a situation in which that meant that if this was anything like an emergency or surprise attack situation, where we were being attacked, it was simply physically impossible to retaliate against Russian targets or only on Chinese targets.

How did this essentially absurd situation—a system in which tens or hundreds of millions of people might be targeted unnecessarily—come about? We've already seen some of the bureaucratic incentives that went into creating this situation: the nearly universal desire of airmen and planners not to be "left out" of an important national conflict. Another reason was the almost unimaginable complexity of creating even one single target list and plan for hitting it; this task was

[News: roll-back of China (at JCS level)

so complex that the thought of even tinkering with this target list—let alone omitting a whole nation from it—sent shudders down planners' spines.

CINPAC planners were working extremely hard, around the clock, each year, just to produce one plan, and they simply didn't have the ability for a second. **[When did you discover this situation? In Honolulu? Describe.]** Out of a list of tens of thousand targets throughout the Sino-Soviet bloc that intelligence had identified as valuable, the Pentagon ordered lower levels to make plans to hit around a thousand of the most valuable of these in the case of general war the communist bloc. The major challenge lower level planners faced was that many of these targets were co-located: two targets to be hit by two different planes were close enough that the blast from could knock the second plane out of the air, or at a much greater distance, blind him.

In order to avoid this problem—referred to as "fratricide"—the planners were doing extremely intricate calculations, mostly by hand, to devise routes into the target timed so that the planes wouldn't be blown out of the air by nearby explosions. **[Were they also concerned that the other planes' bombs could explode after being knocked out of the sky, which would in turn blow up even more planes, setting off a chain reaction of planes going down?]** They were dealing with thousands of explosions, so they had plans for the planes to weave through a virtual minefield of explosions, timing it perfectly to miss an explosion on this side of the plan, and then one on the other, on and on.

The key to all of this was knowing exactly when each explosion was going to go off. Thus, everything had to be timed perfectly, based on the time it takes for a crew to get off the ground after receiving the Execute order, the time it takes to get up to altitude, and the speed of

the plane once it reaches altitude cruise speed, and the distance to target: plans specified that a particular explosion will go off at time-over-target—TOT—for example, one hundred and seventeen minutes and thirty-two seconds after Execute order, and then a nearby explosion will go off two minutes and twelve seconds later, and so forth. If everything went according to plan, no plane would be struck down by the explosion from a bomb dropped by another plane; no "fratricide" would occur.

As I read these plans, and discussed them with the planners, I quickly noticed several glaring problems with this entire endeavor—several obvious and predictable reasons why everything would *not* go according to plan.

To begin with, I read reports from launch drills all over the Pacific **[Which reports? Where did you read them? When? Narrative—orient the reader in time, to make clear where/when this was happening]**, and saw that the difference in times between receiving the Execute order and the actual launch, for different bases, was often *hours*, in a plan in which *seconds* mattered, for planes to miss nearby explosions. The problem was not with ground crews—they practiced getting off the ground a great deal, and could do it within ten minutes of receiving their orders. (Of course, that varied too in reality, but this element of the chain was comparatively dependable.) However, that's ten minutes from *receiving the order*.

The orders were supposed to get to all the hundreds of different aircraft carriers and bases throughout the Pacific at the same time, and all the plans were based on the assumption that they would. Yet, I read the reports of command post exercises—list of when drill orders went out and when the bases actually received these orders during the exercises—and the differences between

Very Recent!
C. Bowden

when the various bases received the orders were often one, two, three, or even four hours. Some bases never even received the orders. There were always problems in atmospheric disturbances, or in messages getting mis-sent, or held up in some relay point—most of the messages had to go through relay points.

Furthermore, the ability to make the times in the plan depended very heavily on wind. If the planes were all coming from the same direction, then wind would have little effect—it would either slow all the plans down, or speed all of them up, at the same rate. However, the planes hitting each target come from different bases; this was deliberate, for redundancy. The planes often come at the target from either 180 degrees, or more likely, a 90 degrees. This meant that, whatever the wind was doing, it would effect the two sets of planes totally differently—slowing one down and speeding the other one up.

How did the planners deal with the fact that you wouldn't know which way the wind was blowing at the actual time of the real Execute order? There was no way to make arrangements for each possible variation in wind direction and intensity, so their way of dealing with the problem was not to allow for wind at all—they simply assumed their was no wind. This made the plans worthless; it was like assuming there was no gravity.

I pointed these two problems out to a planner once. "Yes, I've thought of these problems before," he said.

"Well, doesn't that make you question the value of making all these calculations and plans?

"These men our risking their lives flying out there. We've got to do what we can to save

their lives."

"But it doesn't seem that this plan is likely to save any pilots' lives at all. It would only do that if the real execution follows the plan *down to the second*, and there's not even the remotest possibility of that happening."

"Well, we're ordered to make these calculations, so that's what we do."

The complexity of the calculations involved in this (illusory) effort meant that the planners couldn't many alternate plans. It took them all year to produce the single yearly-updated plan, and while they paid lip-service to the need for flexibility, in practice they were extremely resistant to the idea of allowing for more than one plan—their plan, which included targets throughout China as well as Russia.

Omitting Russia would have been possible, in theory, because there were so few bases with Russian targets. As I discussed this with planners, I discovered, in practical terms, that if they seriously wanted only to attack China, they could simply cut out entire airfields, thus losing some Chinese targets (the ones intermingled with the planes targeted for Russia on those bases) but cutting out all the Russian targets in the process. However, there was no airfield targeted *only* on Russian targets, and thus, if CINPAC was going to be involved in nuclear war against Russia, China would be brought in as well, even if the President hadn't intended that.

High level authorities could cut out the CINCPAC forces entirely. Of course, they would do that only if it occurred to them that this might be a problem. I never found anyone in Washington who had any idea that there was this kind of problem.

As I was discovering this particular problem with the structure of nuclear war planning in the Pacific, an analogy kept burning in my mind. As an undergraduate at Harvard, I had read numerous books on the origins of the First World War. **[Do you remember which ones? Could you look them up?]** These books emphasized that the planning for mobilization was one of the major logistical challenges facing all nations involved. None of these powers had large standing armies, so reserves had to be called up from their homes, transported by train, and joined up together by divisions, and the divisions had to be brought up from the front. The essential problem was the train scheduling, and it was such a complex matter that they had essentially one plan.

The planners could not countenance the idea of changing any of this plan, because if one small element was changed—even changing the schedule of a particular train by a few hours—the entire plan would spin into disarray.

The effect of this reality on World War I—and I very much felt this would be reproduced in World War III—was that it was nearly impossible for any of the major powers to take moves to limit the scope of the war. Specifically, the Russians had a vast, single plan, involving millions of men, for mobilizing against Austria *and* Germany, yet not one for mobilizing against only one. Yet the Germans had already said, in effect, "If you mobilize against us, we attack. We can't wait for you to finish your mobilization. If you start mobilization against us, we mobilize faster and we attack. " They made that explicit, and all their planning was based on that.

At one point in the buildup to the war, the Czar was told by lower level officials that he had to mobilize to protect Austria in its fight with the Serbs. **[??? I thought you just said their**

plans was for mobilizing AGAINST Austria and Germany] The Czar asked if that meant mobilizing against the whole front, including Germany. He was told, "Yes." The Czar pointed out that this meant Kaiser Willhelm will go to war.

The Czar ordered his generals to mobilize against Austria only. **[??? Against Austria, or defending Austria??]** This drove the Russian general staff out of their minds: they could see now going down the road of the collapse of the Russian empire. Changing the plans would have left Russia completely vulnerable to the Germans. Moreover, they simply couldn't make the plans.

The Russian general staff did everything they could everything they could to get out of the Czar an order to do initiate whole mobilization, which he did with extreme anxiety and reluctance. Thirty million men died as a result.

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The CINCPAC plan for general war was known as the GEOP, the General Emergency Operations Plan. In the GEOP, a number of the bases scheduled to deliver nuclear weapons in the event of general war were in Japan. But US plans for using these bases collided with a central Japanese policy which renounced and forbade the development, possession, *or introduction* of nuclear weapons in Japan. A legacy of Hiroshima was what U.S. planners called Japan's nuclear "allergy." A major provision of Japan's security arrangements with the U.S. was the explicit agreement in writing that no nuclear weapons would be stationed in Japan—any abrogation of this agreement could easily have cost us our major Asian ally and our most strategically important bases in the East.

In practice the U.S. acted as if there were one exception to this agreement. It was, I was told,

known to some high officials in Japan but it was never acknowledged publicly by either side. American warships that came into Japanese ports for R-and-R ("rest and recreation" visits, which were very important to maintaining Navy morale in the Pacific, and thus reenlistment) or for other reasons, virtually all had nuclear weapons aboard. This didn't apply only to the carriers, which were loaded with nuclear bombs for their planes. As Admiral LaRocque later testified, nearly every Navy ship that could carry a nuclear weapon of some kind did so, down to destroyers that had nuclear torpedoes and antisubmarine weapons. None of them ever offloaded these weapons before they came into a Japanese harbor, or anywhere else.

The Department of Defense had a policy that we would not acknowledge the presence or absence of nuclear weapons on any particular warship anywhere in the world. A major purpose of that policy was to avoid having either to lie explicitly or to admit having nuclear weapons aboard these ships in Japanese ports when the political opposition in Japan or antinuclear activists raised the question, which they did regularly. When Japanese officials were asked this question, they said they were confident there were no nuclear weapons present on these ships, since they had not been notified otherwise by the US.

The U.S. could justify its failure, ever, to notify the Japanese otherwise on the grounds, first, that Japanese officials didn't want to be told officially, so they could continue to give this answer without directly lying. And if the truth ever came out, the U.S. could say that its understanding of the agreement didn't require it to notify the Japanese of the presence of weapons that were not "stationed" in Japan but were merely in transit, on temporary visits.

Still, the fact that these weapons would be present in Japanese ports for days to weeks at a time on a given ship, and that at any given time there was usually one or more such ships somewhere at anchor in Japanese harbors, meant that Japanese coastal cities surely constituted high-priority targets in Soviet nuclear war planning just as if they had had nuclear weapons permanently stationed there. And since these weapons were on ships, the chance of a collision or an accident detonating the high

explosives on one of these weapons or otherwise releasing radioactive materials in the vicinity of a Japanese city was not zero, and it was higher than it would have been if the weapons had been stored ashore.

That possibility also applied to the nuclear reactors on nuclear-powered ships and submarines. And eventually the DOD hoped to be able to bring Polaris submarines into Japanese waters, with their additional risk of an accident involving a nuclear-tipped missile, as in the case of the bombs on carriers or other ship-based weapons. A high-explosive detonation could conceivably lead to a partial or full nuclear explosion, but even without that unlikely result the dispersion of radioactive material in a populated area would be a spectacularly bad way of announcing to the Japanese public the presence of US nuclear weapons in their waters.[4] But the risk, compared to the convenience of using Japanese ports, seemed small enough to be worth taking.

However, I was always told, we didn't violate the agreement to the extent of actually basing weapons ashore in any of our U.S. Air Force bases in Japan. Planes on these bases were assigned a very sizeable number of nuclear targets in the Vladivostok area and China in general war, but their weapons would have to come at that time from Okinawa or Guam. There were KC-97 tankers on alert in Okinawa loaded with nuclear weapons for these Japanese bases. The operation was codenamed High Gear. If there was an order to execute war plans or a launch on warning, these planes would take off for Japan.

In principle, we were to get the approval of the Japanese government before any weapons could be landed in Japan or launched from Japanese bases. But the alert plans called for the transport planes, once launched from Okinawa on warning, to land on bases in Japan and deliver their weapons whether or not permission had yet been granted from the Japanese. There was no provision for them to return to their bases on Okinawa with bombs aboard if the warning turned out to be a false alarm, as in the case of the fighter-bombers on alert in Okinawa, or if the Japanese failed to grant permission during the several-hour flight to Japan.

Unlike the fighter-bombers, there was no arrangement for these transports to "launch on positive control" in the event of ambiguous warning. While the bombers were to fly to a rendezvous area to circle around waiting for an execute order, (hopefully) returning to base if they didn't get one, the High Gear transports launched at the same time would go on to land at U.S. bases in Japan whether or not an execute order followed. So a false warning, as well as a true one, could have resulted in US nuclear bombs landing in Japan, violating the treaty. That was a possibility explicitly allowed in our planning, secretly from the Japanese. If that had become known to the Japanese public, the effect might have been almost as bad as if they had become aware that the plan had been carried out. But it seemed unlikely that the Japanese would learn of this planning. The risk was regarded as acceptable. And if a false alarm did occur, the planes would be landing at U.S. bases, so the Japanese were unlikely to become aware of a temporary violation.

The very complexity of these plans was a tribute to the fact that the treaty provision was taken with considerable seriousness. Everyone understood that a known violation of that provision was likely to lead to an abrogation of the security treaty, and probably to the fall of any pro-US government in Japan and its replacement by a government that might entirely change its relationship with the US and China. Almost certainly it would lead to the loss of US bases both in Japan and in Okinawa.

That was why there was apparently no pressure from the Air Force to accept the risks of discovery by the Japanese in order to have weapons stored on the bases with their planes at all times, in secret violation of the treaty. Strategic Air Command already had nuclear forces stationed in Okinawa and Korea, so having marginally more forces in Japan didn't justify taking diplomatic risks of losing Japan as an ally and as an "unsinkable aircraft carrier," as Britain was called in World War II.

However, in early 1960 I learned that one small Marine air base at Iwakuni in Japan had a secret arrangement whereby the handful of planes on it with general war missions would get their nuclear weapons very quickly in the event of a general war alert. In contrast to all the other planes on Japanese bases, the Marines at Iwakuni would have nuclear weapons within minutes instead of hours.

Because of the special relation of the Marines to the Navy, there was an LST (Landing Ship, Tank) anchored just offshore Iwakuni with nuclear weapons aboard, loaded onto amphibious tractors, just for the small group of planes on this base.

This LST, the *U.S.S. San Joaquin County*, had a cover mission as an electronics repair ship. It was permanently stationed not just in the three-mile limit of Japanese territorial waters but anchored a couple of hundred yards from the beach, in the tidal waters. By any standards it was stationed within the territory of Japan. And so were its nuclear weapons.

In any kind of nuclear emergency the *San Joaquin County* would operate as it was designed to do in an amphibious landing. It would haul anchor and come straight ashore. The front of the ship would open up like a clamshell and amphibious tractors loaded with nuclear weapons would come down a ramp into the water or directly onto the beach, then head on land straight to the airstrip where the weapons would be loaded onto the Marine planes.

Thus this handful of planes would have nuclear weapons some 6 to 10 hours in advance of the other hundreds of Air Force planes on bases in Japan. If they made use of this and launched on their missions immediately, they would be among the very first planes in the world, along with planes on Korea, to release bombs on Communist targets. Since they were so few and their targets so peripheral, the main effect of this would be to alert Communist forces worldwide of the onset of general war, if they had not launched first. But presumably in most cases the Marine planes would be held back to be launched with other forces, so that the effect of their having weapons sooner would be imperceptible.

But the effect of the Japanese discovering the permanent presence of these weapons would be very perceptible indeed. It might well blow the U.S. out of Japan. If the Japanese government should become aware of the situation, and more particularly if the political opposition became aware of it, the U.S. was likely to lose all its bases in Japan. There could be even be a total rupture of diplomatic relations between the U.S. and Japan, which might possibly shift toward the Chinese.

So it was regarded as a super-secret from the Japanese and was relatively little-known even

among US Air Force and Navy planners. Yet the arrangement was apparently fairly well known at the base itself, and the landing of the tractors and bombs was a maneuver that the LST was said rehearse occasionally. What was known to the pilots, the tractor crews and the crew of the LST at the base was potentially knowable to some fraction of their girlfriends in the region. In fact, the planners to whom I spoke about this, at 7th Fleet, in Japan and back in Hawaii, tended to assume that Communist spies must already know of the situation and were waiting for the time and the right way to reveal it to biggest effect.

RAND studies of possibilities of sabotage suggested to me what that way could be. It would be no trick for Communist frogmen, Japanese or others, to swim out to that ship and plant limpet mines on the side of it. An explosion on what purported to be an electronics repair ship would at the least raise public questions about its nature and official investigation which could quickly reveal its cargo of nuclear weapons. If the saboteurs were lucky and used a big enough mine, they could even detonate the high explosive on one or more of the nuclear weapons aboard, scattering radioactive material in the Iwakuni region (which happened to be not far from Hiroshima), or even conceivably cause a partial nuclear explosion. In fact, to think big, the mine itself could be nuclear. There would be no way of telling, in any of these cases, that the explosion had been caused by outsiders as opposed to an accidental explosion of American weapons stationed aboard the ship. The actual cause of the explosion, for example, that destroyed the battleship *Maine* in Havana harbor, propelling the U.S. into war over a hundred years ago, remain unknown to this day.

The stationing of these weapons in Japanese tidal waters, to no tangible benefit whatever, was one of the most irresponsible actions it was possible to imagine. So it seemed to all the nuclear planners who were in on the secret. But they didn't know what to do about it, since they presumed it had been accepted by CINCPAC, a Navy admiral. Did any civilian authorities, or military commands higher than CINCPAC, know about it? These officers didn't know, and they could try to find out or alert higher levels bypassing intermediate levels of command and CINCPAC only at great risk to their

own careers.

That may be why someone told me about it in the first place, and why others told me their concern about it. As a RAND consultant, someone not permanently wired into their chain of command, I could alert higher levels or other agencies without paying the same price they would have had to. But they could justify telling me because of the general instructions they had gotten that they could tell me anything, for purposes of our research.[5] I wasn't sure what to do with the information either, since I didn't then have contacts in the Office of Secretary of Defense, the State Department or the White House. I told high officials at RAND about it, and they in turn, I was told, passed it on to a general in Air Force plans. Richard Goldstein, a RAND vice president, brought the word back to me that Air Force officers agreed that this was an extremely serious situation but it wasn't easy for them to do anything about it because it was a Navy matter. For many years there had been a working alliance between the Navy and the Air Force to emphasize the importance to the US of nuclear weapons, which worked to the budgetary disadvantage of the Army. It would be a delicate matter, threatening this alliance, for the Air Force to raise questions about where and how the Navy was storing its nuclear weapons. It wasn't prudent for the Air Force to make waves for the Navy, so to speak.

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In 1960, I didn't know what I could do about this problem, or the command and control problems I had been discovering. Just who would make the decision to go to nuclear war? What I was learning indicated that that might have depended on weather and its effects on communications from Oahu or Washington. And if it were made, on the basis of prior authorization, in Hawaii or Westpac rather than Washington, that in turn would have determined

the content of the decision, almost surely in favor of nuclear war against China.

The question was whether the president had ever meant to put that decision, for part of any given day, in the hands of the commander of the Seventh Fleet, and whether he should do that. If not, I was coming to think, he had better make that very explicit and clear to all concerned and check that the guidance had gotten through. And he should even consider withdrawing the precedent he had set by giving such authority to Admiral Kivette's superior, Admiral Felt.

These were matters that needed to be raised in Washington, though how, to whom and through what channels were delicate questions. It wouldn't serve anything if the main reaction to my reporting and recommendations should be consternation that I knew and was conveying this sensitive information, and an effort to track down and punish the people who had told me. Since I was working for CINCPAC precisely on command and control of nuclear operations, the officers who had told me could argue that they felt I had a "need to know," but it was harder for me to make that case for telling someone outside the Pacific Command unless they were above CINCPAC in the chain of command. Who in Washington had the authority to investigate and perhaps change this situation?

Obviously, the President, but at this point I wasn't working for anyone in the White House on these matters, nor was anyone at RAND. It was hard to contemplate getting to the President or any staff person close to him without revealing what it was that needed urgent attention. Yet to reveal it to anyone who didn't know it already (that is, to almost anyone) was to open myself to subsequent charges of extreme indiscretion, a major breach of security. That could quickly knock me, and RAND as well, out of the chance of remedying this situation or any other.[6]

I had to proceed very carefully. Meanwhile, I continued to explore the dimensions of this and

related problems. How widely were these delegations known in the Pacific, and what were the various effects of the knowledge? And in what other ways did this obsession with assuring that US nuclear strikes would be launched "when appropriate"--assuring that neither communications breakdown nor enemy action could prevent this--lead to dangers that US nuclear strikes might occur when an adequately-informed President in effective control would have *rejected* them?

My main focus remained the possibility that someone in the chain of command below the president would order or carry out a nuclear attack without any authorization from higher commanders. But the story of the letters and further delegations implied that under some circumstances the officer doing this might believe, and might be correct, that he had actually been authorized to make this judgment and take this action under these circumstances. Such cases would be major additions (major because they would affect very large portions of the overall forces, whole theaters or fleet commands) to the cases I was already examining, where officers might launch attacks *without* believing that they had been officially authorized to do so.

In both sorts of cases, the officer might feel that he was carrying out the spirit of his general orders, the fundamental wishes of his superiors, what the president would want him to do if he had the same information available to the lower commander. And in both cases, this belief might be *untrue*; he was launching an attack that the president not only had not ordered but did not want and would not have wanted to happen even if he had all the tactical information available in the field.

Nevertheless, in the presence of those letters, while communications were out during a crisis, the lower commander launching the attack could feel that he was obeying not only the spirit but the letter of his directives, which gave him the authority to judge the situation and to take the initiative he

was choosing.

Moreover, knowledge of the letters--which appeared to be more widespread than the president probably knew or intended--probably contributed, by analogy, to a willingness among lower officers to take initiatives of their own even when they had not been given express predelegation to do so. (CINCPAC's action in delegating authority to Seventh Fleet was an example of this. I guessed that President Eisenhower was not aware of this and had not intended it: though it was also possible that he might be aware of it and might have approved it if he did know of it. I intended to look into which of these applied).

Violations of directives restricting nuclear initiatives had to be understood in this context, it appeared. What I found out in Kunsan with respect to a readiness to violate directives on launching planes or expectations of non-observance of positive control procedures was a direct example of this. But another pervasive example was the non-observance of the "two-man rule" in command-posts throughout the Pacific. To prevent unauthorized action by a single duty officer with access to Execute codes in any particular command post, there was a universal and supposedly ironclad rule that there must be at least two such officers on duty at all times, day or night, and that they must both be involved in, and agree on, the authentication of an order to Execute nuclear war plans from higher authority and on their decision to relay this order to subordinate commands. Since physical conditions differed at different bases, each command post, I found, had devised its own procedures for assuring that this directive was obeyed. A typical procedure would be to have half the authentication code in each of two separate envelopes and half of the codes for Execute orders and authentications to be sent to lower commands in each of two safes. Each of the two duty officers would hold one envelope and

possess the combination to only one of the safes. Or, if the office had only one safe, each officer might have just half the combination to it. One way or another, each post purported to have arrangements so that one officer by himself could neither authenticate orders received nor send out authenticated Execute commands.

But in practice, I found, there were often times when there was only one man on duty in the office. The personnel requirements for having two qualified officers sitting around in every such station at literally every moment of the night were just too great to be met. Duty rosters did provide for it, but not for back-ups when one "had" to be elsewhere, to get some food or for a medical emergency, his own or, on some bases, his wife's. Did that mean that all subordinate commands would be paralyzed, unable to receive authenticated Execute orders, if the remaining duty officer received what appeared to be an order to commence nuclear operations during that interval? That could not be, in the eyes of the officers assigned to this duty, each of whom faced the practical possibility of this situation. So each of them had provided for it "unofficially," in his own mind or usually by agreement with his fellow duty officers. Each had the combinations to both safes, after all, or some arrangement for acquiring them. One would hold both envelopes when the other had to be away. Where there were more elaborate safeguards, the officers had spent some of their idle hours late at night figuring out out to circumvent them, "if necessary." They had always succeeded in doing so. I found this in every post I visited.

The officers would tell me this "off-the-record" but with some pride, partly to reassure me that they had conscientiously and sometimes ingeniously managed to assure that the system would work (to Go) even if they or their partner didn't happen to be on hand at the crucial moment. But that meant that the two-man rule was only a facade, throughout the Pacific. The system's ability to prevent one

ask Woodward
+ Blair
see Rosenbaum in
Moon

man alone, from sending off Go commands to subordinate units, was a false promise. And that was in addition to the fact that the two-man rule, even if both men were present, was vulnerable to collusion between them, or coercion (such as a gun in the hands of one of them), either of these especially plausible in a crisis.[7]

All such arrangements reflected a command environment in which (1) it was regarded as overwhelmingly more important to assure a Go response when required than to prevent a false alarm or an unauthorized action (even though there was more than lip service to the latter concerns); and 2) there was tremendous emphasis on fast, immediate response to warning of nuclear attack and to a high-level Go command, for two reasons: (a) to destroy enemy weapons before they were launched; and (b) to get American weapons launched before they, or command posts and communications, were destroyed. Effective safety catches, whether in the form of rules or physical safeguards, meant potential delays in response; and delays were anathema, dangerous to the mission (of disarming the enemy) and to the survival of the weapons, the command system, and the nation. To such concerns, considerations of safety and of high-level control gave way [in the face of an enemy believed to be of Hitlerian savagery and armed with a nuclear missile force, superior to ours, destructive beyond Hitler's dreams],

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[Note to Dad—I scanned this section from your 1975 narrative—I haven't had time to edit it yet, so it's still very rough, and contains some repetition (re: the single, rigid plan) with above sections]

In the course of my work in the Pacific, I learned from Dr. Ruth Davis, who was in charge of the computer studies for CINPAC, the computer development for CINCPAC, for the first time of a plan she said I should see, called the JSCP, pronounced "J-SCAP" on which the GEOP, the General Emergency Operations Plan, was based. (JSCP = Joint Strategic Capabilities Plan). She told me that the Secretary of Defense and the President - and I don't know how she knew this, but it turned out to be correct - did not know of the existence or the nature of the JSCP but that I definitely ought to see it to understand the character of the plans.

I'm almost sure that I did see it in the Pacific; because it was armed with that knowledge, that I was able, in Washington, to continue to study the current and past JSCPs and to discuss such matters with the planners in Washington, when my contact~ colonels in the Plans Division of the Air Staff, realized how much I already knew.

Now, it turned out to be a fact that the JSCP, both the contents and the existence of the JSCP, had been kept from all previous presidents and Secretaries of Defense, all civilian authorities. This seems almost unbelievable unless you knew the background of relationships between the Secretary of Defense and the Joint Chiefs.

There was no Secretary of Defense until 1948-49, that was the time that the Department of Defense was created, and the responsibilities of the Secretary of Defense gradually evolved over the next decade. Before 1958 the Secretary of Defense and his Assistant Secretaries were seen essentially as functioning in certain non-operational areas, such as procurement, research and development, personnel, budget, and so forth, but not having either responsibilities or command

powers in direct area of combat operations or plans. Thus, although a Secretary of Defense like Charles Wilson, might be in on high-level crisis decisions, as in the Quemoy Crisis of 1954 and 1958, he also might not be; in fact the record shows that he was sometimes present and sometimes wasn't, and it would depend on the personality and his relationship with the President. So, during this whole period, then, the Joint Chiefs had a basis for saying that the Secretary of Defense had no "need to know" operational war plans, since he was not involved in the operational command problem. But in 1958, the Reorganization Act of '58 put the Secretary of Defense directly in the chain-of-command, second to the President in the chain-of command from the President to the unified and subordinate commanders.

It was President Eisenhower's desire to abolish the Joint Chiefs of Staff. He had no respect for them, having dealt with them as a theater commander himself, the supreme commander in Europe, but in particular he was disillusioned with their post-war performance. He wanted to abolish them, but they were preserved mainly by Congress, who wrote into the Acts that the Joint Chiefs should be the principle military advisors to the President.

The Act did not put them in the chain-of-command, which went from the President to the Secretary of Defense and to the unified commanders, such as SACEUR and CINCPAC. The Secretary of Defense, however, who took office at that time was Neil McElroy, from Proctor and Gamble, who had no background in military matters and who, though supposed to be a very intelligent man, put in an unusually short day because he had a sick wife. He was easy to manipulate by the Military. The Joint Chiefs carne to McElroy and urged him to write a DOD directive which reinterpreted this Act, as follows: "The chain-of-command is from the President

as Commander In-Chief, to the Secretary of Defense, to the Unified Subordinate Commanders, through the Joint Chiefs of Staff," implying that the Joint Chiefs would be, in some sense, a channel for his directives. They further got him to agree, as a practical matter, to allocate all operational responsibilities to them. In effect, the Act was circumvented; although it was on the books, it resulted in no real change of operating responsibilities in 1958 or 1959.

Secretary Gates, who succeeded McElroy under Eisenhower, had much stronger instincts to exercise control himself, but because all past practices kept him from knowing what it was that he needed to know and did not know, and where the levers of power really were in the Pentagon, he had almost no ability to do this. One aspect of this secrecy was that the JCS had formally adopted, in writing, a set of practices designed to keep the Secretary of Defense from ever asking any questions directly about their general war plans. The first protective device was to call the war plan the Joint Strategic Capabilities Plan, which did not betray to a layman that it had to do with nuclear war targeting, for the current year, in Russia, and other aspects of general war **[34]** planning. It was usually referred to by its initials JSCP, but there was a directive in writing by the Joint Chiefs of Staff that the words "Joint Strategic Capabilities Plan" or the capital letters were never to be allowed to appear in correspondence between the JCS and any agency of the office of the Secretary of Defense. If there was an absolute need to refer to such plans in some oblique fashion, reference was to be made to "capabilities planning" (lower case) which would, again, not suggest the existence of a specific plan or suggest that it was a war plan. Any JCS staff papers that used these initials or words, had to be retyped to eliminate all such references if they were to be referred to the Secretary of Defense.

The effect of this was that almost certainly no civilian, including the Secretary of Defense, in the Office of the Secretary of Defense was aware that there was a piece of paper of the character of the JSCP. What they did see, as, in effect, another attention-distracting device, was a plan called JSOP, or Joint Strategic Objectives Plan, which was a plan for budgetary procurement and R & D purposes which covered a five-year period starting four years in the future, so it covered the period from four to nine years off. It talked again of objectives, tasks, concepts, and area responsibilities as a basis for planning. This actually followed the current JSCP language, usually word for word rather ironically, implying that objectives and tasks that far in the future could be regarded as identical with those for the next twelve months—so the reader of the JSOP would have, without knowing it, a pretty close idea of the nature of our current war plan.

But that held only with certain, quite significant exceptions. For one thing, an annex to the JSCP (with no counterpart in the JSOP) was the SAC War Plan, the SIOP (Single Integrated Operations Plan) which laid out, in detail, the nature of our nuclear war operations. Throughout the Eisenhower period, and mainly for budgetary reasons, a strategy had been adopted that treated nuclear weapons as essentially "conventional," to be used wherever they were militarily efficient. Thus, not only was the general war plan entirely nuclear, but what they call limited war planning also relied heavily upon nuclear weapons, mainly shorter-range nuclear weapons such as the artillery and short-range weapons possessed by the Army and cruise missiles possessed by the Navy. A third category they called "cold war operations" which included subversive covert operations.

Now, a key question was the dividing line between the type of wars. In particular: When were the general war plans to be called into action? The JSOP provided no definition of general war that would give a hint as to when the general war plan was to apply. Such a definition did appear in the JSCP; in fact, this was perhaps the most "sensitive" piece of information in the JSCP, and the main reason for protecting the JSCP from the eyes of civilian authority.

The key to the definition in the JSCP was the fact that in the course of the inter-service rivalries that existed in the period when the military budget was, from their point of view, severely restricted by Eisenhower's concern with the possibility of national bankruptcy, the tactics of the budget battle between the Services had come to focus on the war plan and specifically on the definition of general war. The key budgetary question was regarded as being: How many divisions was the Army to be allowed to ask for in support of its mission? This, of course, depended on how its mission was specified. As the Air Force saw it, and with some basis, there was an almost unlimited amount of money that could be spent on Army divisions if they were to be allowed to match the number of Russian divisions. (This was especially true since, for somewhat different reasons, both American and NATO intelligence produced, for years, enormously inflated estimates of Soviet ground strength: for example, often ignoring the fact that the Russian division was less than half the size of an American division, so that a simple comparison of numbers of divisions gave very misleading notions of the balance of actual numerical forces, aside from differences in types of communications, tanks, firepower, and many other aspects.)

Maxwell Taylor was the only one to reveal publicly the nature of this controversy and the budgetary focus on the planning, which he did with *The Uncertain Trumpet*, his book which carne out in the late 50's after his retirement as Chief of Staff of the Army. He described the JSOP, but even in that book he did not mention the JSCP. I don't remember when, if ever, that name carne out in public. He did describe the controversy and pointed out that the battle had been fought and finally won by the Air Force on the issue of the definition of general war. He did not, however, mention that the definition did not appear in the JSOP (which was available to the Secretary of Defense and his civilian staff), and that it was stated only in current war plans stemming from the JSCP (plans which were not accessible to civilian authorities or staffs).

From a practical point of view, of course, the occurrence of general war was defined by the implementation of the JSCP general war plan. The question of *when* that would be implemented carne to be determined by the definition. The definition, which appears only in the JSCP and in the subordinate documents like the war plans in the Pacific, was: "General War is defined as armed conflict with the Soviet Union" That raised another practical problem: how armed conflict was to be defined or determined. Since there were occasional skirmishes in East Europe involving patrols and around Berlín, it was generally accepted that a platoon skirmish with Russian forces was not to be regarded as "armed conflict," for the purposes of JSCP. The controversy between SACEUR Supreme Allied Commander-Europe: the Nato Commander (always an American) and lower levels of the US Army in Europe came to be defined as to whether one regiment or two regiments were to be dividing lines for conflict with the Soviet Union.

Needless to say, all gaming or planning involving Berlin Corridor Crises talked of confrontations starting with regiments but quickly going to the level of two to three divisions. It was essentially assumed by all that one to two divisions would, beyond doubt, meet the definition of the conditions for general war.

In practice, when they came close to actual confrontation in the Berlin Crisis—which, remember, was not really until 1961 - people did not imagine going to general war as soon as one or two divisions be involved. But into 1961, no plans existed for war beyond the level of one and two divisions with the Soviet Union except the general war plans, based on the JSCP and the SIOP. Moreover no one was allowed to create any alternative plan, because of the intimacy of the relationship between the planning process and the budgetary process, which was the heart of military concern throughout this period. To have made a plan envisioning limited, non-nuclear operations against Soviet units involving more than a few divisions, would have been to admit that the Army had a potential role or responsibility for such a conflict; that would have given them a charter to go to their allies in Congress, with the "requirements" for such capability, which meant not only the divisions, but artillery and close air support. Such large budgetary requests, if granted, would be taken out of the hide of the Air Force and Navy, which were predominant during this period. There was great resistance to any/plans being made for anything but this one general war plan stemming from this basic resolution of the definition of general war.

None of this might have had a determining influence on the thinking of the highest level planners in Washington who understood what this was all about, but at all the lower levels no hint was given to anyone that this was all a game being played for the purpose of the budget; on

the contrary, all of their preparations, training, alerting procedures, were based upon the plan as it was received from the Joint Staff. So that definition was, in effect, taken more and more literally if one went down closer and closer to the actual level of combat operations.

Meanwhile, the Sac War Plan had evolved by the year 1960 into the plan called the SIOP or Single Integrated Operational Plan, which for purposes of efficiency and coordination had gathered all the nuclear war plans, and general war plans of the various commands, into one coordinated target list so as to more efficiently allocate weapons to targets all over the world. The desire for efficiency in allocation was a major motive for this plan, but the plan itself was so complex in the coordination that it involved that it had only one, real strategy embodied in it. The price of bringing every theater and component service plan into harmony with every other into one plan was the total elimination of any flexibility in carrying out the plan. So much planning was involved in producing this one that there was simply no staff time available to produce a second alternative.

The focus was so much on harmonization and coordination that the planners themselves were appalled at the confusion and the chaos that might result if there was an alternative presented, with the possibility that people might carry out different plans. There was thus, an exact parallel in every detail to the mobilizing plans that gave total rigidity to the mobilization of the Russians against Germany in World War I which made it impossible, for example, for the Czar to mobilize against Austria without mobilizing against Germany even though they recognized that mobilizing against Germany, with whom they wished not to be at war, would

certainly cause Germany to execute its mobilization plan. Meanwhile the mobilization plans of Germany, which were based on precise railroad schedules, were so complex and rigid that they were not really able to think of mobilizing against any one opponent, France or Russia; they provided only for one strategy against both opponents.

By contact with the air staff I furthered my knowledge of the rationale behind the various plans and the high level plans. I had become aware that there were a number of high Air Force planning officers, colonels and generals--in particular a part of the plans division headed by Glen Kent, now a Lt. Gen., and another part headed by Col. Russ Dougherty (now - 1975 - CINCSAC)--who were very concerned with the madness of some of the characteristics of the planning process and current plans. But inasmuch as it was determined by the high level superiors, on the basis of the budgetary conflict with the Secretary, they were really unable to influence it through ordinary command channels.

One major reason for the JCS to keep these disputes from the Secretary of Defense was a fear that he would decide then in a way that would influence the budget unfavorably to the Air Force, yet which could not be predicted or controlled by the other services either; so that there was a general agreement to keep the nature of the controversy and the way it was resolved from the attention of the Secretary of Defense. Even though Secretary of Defense Gates increasingly insisted on having a say in operational matters, the practice was that he became aware only of such problems as the Chiefs unanimously agreed to submit to him; and such a submission had to represent a definite determination on their part that all of them had better prospects of gaining by

submitting it rather than by continuing to bargain it out among themselves. So very many important problems were never brought to his attention.

During this period Rand did not work for the Secretary of Defense but for the Air Force, so in effect, only by going out of channels in a way that would directly threaten the budget and existence of Rand could Rand researchers and officers have made the Secretary of Defense aware of this situation.

Meanwhile, I carne increasingly to feel that it was essential that the President of the United States should be made aware of the nature of this general war planning system with all of its risks, both of rigidity and of increasing the likelihood of war, and the likelihood that if any sizeable war resulted, in particular with any Russian troops, the effect would be genocidal on an almost unimaginable scale throughout the world. It seemed essential to me that the President himself have before his eyes the actual JSCP, for the first time, so that he could read it in context with the SAC War Plan, and make himself aware of the extreme simplicity, along with rigidity, stupidity, and bloody-mindedness, of these plans. The extreme nature of these qualities was almost impossible for anyone to imagine from a briefing, or on any basis except actually examining the written plans; with their actual wording, and with what, in sum, they did *not* say, as well as what they did.

The focus of my concern carne increasingly to be, how to bring the nature of these plans to the attention of the President and the Secretary of Defense. For several years 1 could almost have summed up as my highest objective for my own personal influence, that I hoped to move some pieces of paper from one level of authority to a higher one, from a military to a civilian

level . I wanted to move one document, the JSCP, to the office of the Secretary of Defense and to the President's office in the White House, so that civilian authority could become aware of and then act to influence and control the nature of our general war plans. I also wanted to make civilian authority aware of the extreme degree of belief in subdelegation, in addition to all the risks of unauthorized action I had discovered. Unfortunately, I had no direct access to Secretary Gates.

[Later: PP from OSD/Plans to Congress: then to Public.

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[This section also comes from the scanned 1975 draft narrative, and I haven't edited it yet, so it is extremely rough.]

In 1960, after I returned from the Pacific command and control study, I came into contact with two people who were widely supposed to be future officials in the Kennedy Administration. One was Paul Nitze, who took part in a conference at Monterey sponsored by Rand, on alternative military strategy. I spent a long drive to Big Sur, during a break in the conference, with Nitze, who had long had an interest in rnilitary matters and had been the drafter of the famous NSC-68 (just declassified in 1975 by Freedom of Information Act suit) which had been the planning basis to our big armament program in 1950. He was now head of the Democratic Party Advisory Committee so he was the main Democratic figure on military political planning, and was expected to be a high official. I spent the time explaining to him the importance that the President personally come to read, take an interest in, and insist on monitoring and supervising the general war plans, though I did not describe them to him in detail. I simply said at great length

background of Nitze

(First thing I read in ISA.)

what the urgency of this problem was, and that if he should become an official in the new Administration he should see to it that the President immediately inform himself on these matters.

I gave the same message to Walt Rostow, at a meeting of advisors on policy speeches during the Kennedy campaign that was convened by Archibald Cox. The meeting, at the Harvard Law School, was also attended by Ken Galbraith, and Chester Bowles, and the whole meeting was spent on Bowles' lecturing, but during that meeting - in the parking lot, during a long ,break – I spoke to Rostow, telling him what I had told Nitze. I further urged Rostow, that if he were ever close to the future president, he must ensure that the President ask to see the JSCP.

As a result of some help I had arranged that Rand researchers give to Kennedy in his speechwriting during the campaign, I was invited to the Inaugural Ball in Washington. On the Monday morning after the Inauguration, the new officials for the first time sat in their offices. I went to see Paul Nitze that Monday morning, in his new office as Assistant Secretary for International Security Affairs, at which time I recalled to him our conversation of the fall before. I told him, "Now that you are in office, I can tell you the details of these plans." The Assistant Secretary for ISA is in charge of policy planning and would be the natural official to deal with any kind of planning, although they

had never dealt with operational planning before.

As a result, Nitze did ask to see the JSCP; he asked it through Harry Rowen, who by this time had become his Deputy Assistant Secretary for Planning and Policy. Rowen passed the mission to me, as an ISA consultant. I saw a military officer in charge of plans under Rowen, who had been in that office for some time, an army general, and I made the mistake at that point

of describing some of these problems to him. At the end I asked to see the JSCP for Nitze and he then refused. He said, "You have no need to know," and he strongly refused to Rowen to allow any civilian access to that plan. He felt that he had access to it only informally, as an army officer, not in his capacity as an official within ISA. So Nitze's attempt to get at the plan was blocked. Later Harry arranged for me to see McGeorge Bundy, to brief him on this set of matters on command and control and the plans. I was ushered in by Robert Komer, who was Bundy's assistant. I think it was February of 1961, the first month of the administration. I had never met Bundy, who had been at Harvard while I was there, but I had met Komer at Rand a couple of times earlier. I had an hour scheduled with Bundy. As I went in I worried that he was likely to be very skeptical or suspicious of the fact that I seemed to know so much about war plans as a civilian. In fact, he was not yet aware of how esoteric all this knowledge was, or wasn't, but I didn't realize that, and I felt rather uncomfortably that I ought to begin by giving him some hints as to how 1 had gotten at this information. I began to talk of my participation in the CINCPAC Command and Control project and my work with the Joint Staff. After two or three minutes of this he interrupted me very snootily with the cold question, "Is this a briefing or a confessional?" Whereupon I said to myself, "Alright, you asked for it," and proceeded quickly to outline the nature of these problems with the JSCP, emphasizing that I took for granted, on good basis, that he was ignorant of all these things and would not, in the normal course, ever have learned of them.

I had the satisfaction, within a few minutes, of seeing his mouth drop open as he began to take furious notes, shaking his head and exclaiming under his breath.

I also told him of the purported letters from President Eisenhower. I said that the overall effects of the widespread belief in their existence were so great, in propagating a general willingness to take nuclear initiatives combined with a widespread ability to do so, that President Kennedy should consider rescinding the letters, if they did exist, and making it known widely throughout nuclear commands that he had done so and why, in order to recover his own control of the process. Or if he did not choose to do that, he should take steps to limit the effects and dangers of further delegation and imitation.

I had prefaced this discussion by asking him if he knew of any such letters as I described, and he said that he didn't. I told him I hadn't seen them myself, but that I had no doubt that important officers in the Pacific believed they existed, and that their belief had dangerous consequences.

He took notes and asked penetrating questions very quickly for the whole hour. Afterwards Komer was very impressed and said to me that it was an extremely successful briefing; "I have never seen him more concerned."

I gave him a list of recommendations to deal with the problem, starting, of course, with the advice that he should begin by asserting his authority to read the JSCP, get hold of it, and then should read it, and familiarize himself and begin to work on it.

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A few days after my briefing to Bundy, I was told by Harry Rowen he and Bundy had agreed that this was an important subject to investigate. Bundy could see nothing in the files available to him

that supported what I had described, but he already knew that was not conclusive, since the departing president had taken most of his White House files with him.[8]

At an NSC staff meeting, Bundy announced that a joint White House/DOD Committee of one--namely, Daniel Ellsberg--was being formed to investigate the problem of presidential authorization of the use of nuclear weapons. Basically, Harry Rowen told me, my task was to find out whether the letters I had heard about actually existed. I would have full authority, which would be confirmed by the White House, to "go anywhere, ask anything, see anything" bearing on this.[9]

It seemed a little odd even to me that Bundy would give this task to me, as a RAND consultant, instead of just asking the Chairman of the Joint Chiefs or the Director of the Joint Staff himself. (The reasons for that became clearer to me in the end.) But I set out to answer the question.

My first visit was to Commander Tazewell Shepherd, President Kennedy's naval aide in charge of the nuclear alert procedures. He carried the "football," the satchel with the authenticating codes that would enable the President to authorize the execution of various war plans. I told him what I had heard in the Pacific, and he said it was news to him, and he seemed genuinely convinced it was baseless. He confirmed that, as the President's liaison with the nuclear command and control system, he was the one who ought to know if such letters existed, but he swore that he had never heard of them. Moreover, he had no knowledge of any authorization having been given in any form to any of the unified or specified comanders for executing their war plans in the absence of an express presidential order, and he felt that if such an authorization existed he would have known about it.

I already had had enough experience to know that an officer in his position could and would lie

convincingly about such matters in the interests of secrecy, but the best judgment I could make was that he was trying to be helpful and was being honest with me. He knew that my authority to ask and to get a straight answer came from Bundy, and it didn't make sense that he would want to deceive the President's Assistant. (If he had felt strongly enough that it was a mistake for Bundy to have brought a consultant or even a subordinate into this sensitive area, he could still have lied to me and then called Bundy directly with the information. But this would have been an implicit reproof to Bundy for sending me over, risking Bundy's displeasure.)

Nevertheless, Shepherd undertook to ask others working the presidential comand post in the White House about this. None of them claimed to know anything corresponding to what I was raising either. He then arranged for me to visit the underground command posts that were involved in the dissemination of nuclear directives in the event of nuclear war, including one at Camp David in Gettysburg, Virginia, the AJCC (Alternate Joint Communication Center) under one mountain near Washington which was an alternate command center for the JCS, and High Point, the Alternate National Military Command Center (ANMCC) under another mountain, supposed to house the civilian leaders of the government during a nuclear emergency. (It was my first visit to Camp David. I had been to the other undergrounds before in my command and control work).

Shepherd asked me to let him know whatever I found out. But the officers in those centers claimed to be just as ignorant as Shepherd of any such delegation. Nor did they seem to aware of the assumption in the Pacific that such an authorization existed.

I talked as well to officers in charge at the White House Situation Room. They all felt that they ought to know if someone other than the President was authorized to start a nuclear war, they felt sure

that they would know if that were the case, and they didn't know. In fact, none of them had even heard a rumour that such delegations existed, nor were they aware that this was widely believed in the Pacific. Meanwhile Shepherd reported back to me that his own further investigation had failed to disclose any evidence of authorization.

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[X amount of time] after I initially brieged McGeorge Bundy about the JSCP and the delegation letter, I was taken by Harry Rowen in with him to see Deputy Secretary of Defense Roswell Gilpatric, who had apparently been seized with this problem [a Pentagon expression]. Gilpatric told us that Bundy has asked him to "get the JSCP for the president," whereupon Gilpatric himself had called the joint staff and had been put through by his secretary to the colonel in charge of dissemination of nuclear war plans within the joint staff. He asked to see the JSCP. The colonel replied "Oh, we never release that."

Then Gilpatric said, "But the President wants to read it." The colonel replied, "But we have never released that," Gilpatric said, "You don't understand, I said the President wants to read it." This cut no ice. After a number of phone calls back and forth, finally a general on the Joint Staff offered a briefing to the President. To this Bundy, who by this time was advised of what had transpired, and was calling directly, said, "The President is a great reader; he wants to read the plan." Eventually Gilpatric explained, they compromised; the Joint Staff would provide both a briefing and the plan. This was typical of their approach, in that they wanted, by the briefing, to be on hand to make sure to interpret and explain any points that might come up, in

their own terms. As we stood discussing this in Gilpatric's office by this time he had had the briefing on it, which McGeorge Bundy and I believe McNamara had also attended in his office in the Pentagon. I asked, "Did they give you the plan?" He said "Yes, it is right here" and he went over to a safe-vault, which was a large closet which had been converted into an enormous safe in his office to store documents. There were shelves inside this, and he walked inside and brought out the document that they had given him. At a glance, 1 saw that it was not the same size as the JSCP, which is on legal-length paper like all of the plans of the Joint Chiefs. This was an ordinary-sized paper. At a glance it appeared to read like the JSCP, but I began to leaf through it and I went immediately to the critical sentence in the JSCP, the "secret" paragraph under the heading Of "General War" where general war was defined. There was no definition.

The heading in this paper said, "General War" and the first sentence was "In general war we execute the following plan, the SAC War Plan..." and so forth. But there was no definition of general war (just as there was not in the JSOP). I looked up and said to Gilpatric, "This is not the JSCP." He looked very confused and said "Well, it must be. They told me they would bring it, and 1 am sure they said to me that this was the JSCP." I looked at it further and I realized what it must be; 1 said "This is a copy of the briefing that they gave you." He said "Really?" He looked quite put out. He repeated, "Well, they told me that it was the JSCP."

Then he said that he had told them he would write questions on the briefing and then they would set out to answer them. I suggested that what I should do is take the briefing with me, read it over and compare it to the JSCP and write some questions on it for him to send. I was at that moment working on another project which took a few days. Then I went to a separate office

to work alone on these questions, taking the briefing they had given him and a copy of the JSCP, which I got from Colonel Lukman in the Air Force War Plans. I had told Gilpatric that I could get hold of the JSCP even though he couldn't. I then spent, in the end, almost a week writing a very long list of questions and compiling them and working them down. I finally wrote them in the form of assertions followed by a set of questions; a number of assertions and propositions followed by questions a, b, c, d, etc. The quotes purported to come or did come from the briefing that they had given him, so that there was no explicit indication that he had actually seen the JSCP. But anyone who knew the JSCP would recognize that the person writing those questions was extremely familiar not only with the JSCP, but with all the planning and disputes that lay behind it.

The first statement was, "You state in your briefing that each war plan is reviewed and approved by the next higher level of authority:

"(a) When was JSCP '61 reviewed and approved by Secretary of Defense Gates?

"(b) When in the normal planning process is it customary to submit the JSCP to the Secretary of Defense

for review and approval?"

Honest answers to the above were, of course, "No" and "Never." From that point on the rest of the thirty to forty questions got increasingly rough, harder and harder for the Chiefs to answer honestly without simultaneously submitting their resignations. When I handed them to Gilpatric at the end of the week, he looked at them and said, "These are very penetrating questions." I really thought they were too tough for him to send, but he simply signed them and

sent them to the Joint Chiefs, without changing a word and with a short deadline for them to answer.

An hour later Harry Rowen got a call from Gen. Tic Bonesteel, in the Joint Staff, generally regarded as the intellectual of the military staff. He said to Harry Rowen, very agitated, "Do you know anything about some questions we received down here?" Harry said "I might." Then he asked, "Who wrote them?" Harry refused to comment on that.

At one point I did take them over to show Komer, at the White House. He read them and said: "If these were Japanese generals, they would have to commit suicide when they received these questions."

As a result of all this, the actual JSCP did ultimately go to the White House and to the Secretary of Defense. At the White House, it was read by Carl Kaysen, who was by then Deputy to McGeorge Bundy. (Incidentally, McGeorge Bundy had taken on as an assistant to Kaysen a young, brash fellow who had previously worked for Rep. Kastenmaier named Mark Raskin who was to be assigned to arms control because Bundy had, allegedly, the idea that there should be a pacifist on the White House staff. I specifically asked Kaysen to be sure not to reveal these papers that I had written—including Rand papers which I had also written on these problems to Raskin, whom I did not trust not to release them immediately to the New Republic. At that time I saw the President as the only individual who could successfully bring the military, and these plans, under political control; a public uproar, in which powerful Chairmen in Congress would take the side of the military against the President, would, I thought, make it more unlikely that he could do that.)

But I was never able to convince Kaysen that the President's time should be directly spent in reading the JSCP. The JSCP could have been read by any reasonably fast reader, let alone Kennedy, in an hour or two. But a man at the McGeorge Bundy or Kaysen level thinks of his main task as being the management and economizing of the President's attention as well as his time. They could not be convinced that it was worth the President's time to focus his attention on what was "just a paper plan" by these idiots in the military. To some extent it was hard for me to communicate to Gilpatric, likewise, why it was so important for him to take on the JCS on these plans. At one point, much later, he remarked to me, "After all, those plans don't mean anything. When a crisis comes, such as the Berlin Crisis, we call them in, make them lay their plans on the table, and we re-write them."

I tried to explain to him that these plans affected operational planning and preparation in every lower level. Thus, although he could rewrite the paper plans when he got them, during a crisis, "the alternatives that you will have available, to choose among at that time, will be the alter, natives that subordinate levels have 'bought' for you by their procurement, their training and preparations. You will have to choose among those alternatives then existing, and you will find—if you don't affect the plans long before-hand—that your hands are tied in the crisis to an extremely narrow set of alternatives."

I was never sure whether I fully convinced them of this. They were too impressed by their ability to exercise their influence at the crucial moment. And they were extremely reluctant to take on these issues, in fights with the military, before the crisis arose, and thus to expend energy, create friction, suspicions and hostility, and possibly fights with Congress as the military turned to

their allies in Congress, except under the pressure of an immediate crisis. My own feeling about the plan, by this time, was based on a great deal of practical knowledge as to how a piece of paper did affect operational procedures and expectations and behavior at lower levels.

One effect of all these discussions was that the SAC Commander was given, to his extreme reluctance, new guidance for a new plan, which allowed for five options in it instead of one option, options which involved excluding command and control centers in Russia (which, if you ever wanted to achieve an end to a nuclear war, it was virtually essential that there be Soviet commanders with capability to stop the continuing exchange of nuclear weapons; yet of course, every instinct of every commander was to target Moscow command centers as the number one, initial target in Russia under all circumstances). Anyway, we did change the plans [or at least, the JCS and CINCSAC said they had been changed, by 1962]. From my point of view the desirability of doing this was not based on any naive notion that those plans themselves directly controlled everything, or that to change them was to change everything, or that the resulting plans were very great or more humane; it was entirely based on the belief that only if you began to move away from a single rigid plan to be used under all circumstances of major war could you begin to put locks on weapons, to make the whole process far less trigger-happy and dangerous, and to begin introducing questions, at least, even about the acceptability of these genocidal plans.

The effect was that SAC War Planning was entirely changed. For two successive years Gilpatric had me in, in 1962 and 1963, to look at the new plans, which by late 1961 entirely incorporated my language, as written under Harry Rowen in the new draft of the Basic National Security Policy, the basis of all war planning. The plans then incorporated all my language, all

the new options, all the new requirements, restraints and flexibilities and that continued to be true as late as 1963. Each year I would go in to Gilpatric's office and he would have somebody bring to him directly the study. I would sit in an office immediately adjoining him and read the plan for him and write the comments and criticisms.

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In the new administration in 1961, Paul Nitze, as Assistant Secretary of Defense for International Security Affairs, was in charge both of policy planning in the Pentagon and military liaison with foreign countries, including base rights. I told his deputy, Harry Rowen, about the situation in Iwakuni, who asked me to put it all in writing for Nitze and to do the typing myself for special security. This was in April, 1961, just after I had drafted for Nitze and McNamara what became the Secretary of Defense Guidance to the JCS on nuclear war planning.I typed out a memo and stamped it "Top Secret--Eyes Only for Paul Nitze." ("Eyes Only" was not a classification but a designation indicating that this was not for routine distribution within an agency or office and was not to be copied or shown to anyone other than the specific addressees listed in the heading; it was "for their eyes only.")

I wrote in detail all that I knew and how I had come to know it about the role of the San Joaquin County. I also gave a fairly exhaustive analysis of the pros and cons, since anyone first hearing of such an anomaly would tend to assume that there must be some highly technical reason justifying it. I reported that to the officers in the theater aware of it, it was evident that there was no strategic or technical rationale at all, no tangible military advantage counterbalancing the obvious diplomatic risks.

The reason why these Marine planes alone were provided such ready access to nuclear

weapons was simply that their landing strip was near the beach and the Navy was able and willing to provide them secretly an LST close by. Presumably the Air Force wasn't tempted to do something similar for its own planes, because it wasn't practical to keep, say, a KC-97 tanker loaded with nuclear weapons flying continuously above an Air Force base in Japan.

It wasn't even as though a large number of Navy bases were benefitted by this, so that it would affect a sizeable part of the forces in Japan or the theater. This violation of the treaty affected only a handful of weapons at one base. Yet the risk was virtually the same as if it had been a lot of bases.

Nitze had my memo "staffed out." He assigned his assistant Timothy Stanley to investigate the problem, and Stanley had me rewrite my report for other staffers. Eventually I was shown various reports that came out of this.[10] All the facts that I had presented were confirmed. But it was also corroborated by the foreign affairs specialists within ISA that this was a clearcut violation of both letter and spirit of our security treaty with Japan.

This was contrasted with marginal cases like the carrier visits and even the possibility of our emergency alert plans being executed. This was a permanent installation, and it couldn't even be said to be "in the waters, not on the territory" since the ship was so close in that it would be regarded by every legal test as being on the territory of Japan. They corroborated the extreme diplomatic risks that this involved, and concluded that it was highly urgent to correct this situation immediately.

But there was a new piece of information. One of these staffers reported that on first investigating the situation he went to the Special Assistant to the Secretary of Defense for Atomic Weapons and Atomic Energy, who had responsibility for knowing the whereabouts of every individual nuclear weapon in the world, including test devices and weapons under production. The Assistant had an enormous looseleaf notebook that had the reported location of every operational weapon in the world. No weapons were listed in Japan. No ship carrying weapons was listed as stationed there. In fact there was no indication in the book that a situation such as I described existed.

When Nitze's investigator pressed the point, the Special Assistant, whose job gave him very

high status and who was a direct representative of the Secretary of Defense, picked up the phone and called his counterpart in the Navy to check on it. He was told there was no such situation, my story had no basis.

However, in pursuing the name I had supplied for the LST, Nitze's man soon discovered that the San Joaquin County was listed in Navy records as home-ported in Okinawa. And by further interviews he discovered that it was being carried that way in Navy reporting precisely as a cover to deceive the Special Assistant and his boss about the fact that it was permanently based in Okinawa, except for a few months every three years when it was in Okinawa for repairs and overhaul. By coincidence, at the very time of this investigation it was back in Okinawa undergoing its triennial refitting, which would take another month or so.

Deceiving the Secretary of Defense on the whereabouts of a nuclear weapon was the highest imaginable offense within the bureaucracy. No one could miss that, reading this report. It was not within the rules of the bureaucratic game, in the remotest sense. But there was an obvious bureaucratic solution. All that had to be done was to keep the LST in Okinawa, where it was officially home-ported and where it happened to be at the moment. Nitze's staff recommended that he take this up immediately with McNamara. A directive had been drafted for him to give to McNamara to send to the Chief of Naval Operations, ordering the ship not to return to Japan. McNamara had signed and sent it to the CNO.

Harry Rowen told me what happened. Nitze told him that soon after the directive went out from McNamara, Nitze happened to be at a meeting in McNamara's office on another matter along with Admiral Burke, the Chief of Naval Operations. At the end of the meeting Burke asked him to return with him to Burke's office, in a different part of the Pentagon. When they got to the office, Burke sat down at his desk and Nitze saw immediately that he had in front of him a "burn copy" (this was the predescessor to the xerox process, it was a somewhat fuzzy copy on tan, flimsy paper) of my "Top Secret--Eyes Only" memo, which was intended for Nitze alone and wasn't supposed to be

copied. Nitze's subordinates in ISA were mostly military officers, and it was obvious that some commander or captain or rear admiral working for him had seen my memo, copied it and delivered it to Admiral Burke. He also had on the desk a copy of the ISA investigative report, along with McNamara's directive to him.

Burke started discussing my memo and the report, neither of which were supposed to have been sent out of ISA. He made no explanation about what he was doing with them, which surprised Nitze more than it might have later, after he'd had more experience inside the Pentagon.[11] "Burke was furious." He was red-haired and famously given to rages, but this one was in front of an Assistant Secretary of Defense, which was another surprise to Nitze. Burke made no attempt to deny the facts of the reports or to justify anything. The only thing he had to say, in a fury, was "What did Nitze think he was doing, as a civilian, interfering with the operations of ships of the U.S. Navy?"

The fact that this ship was in violation of one of our most important security treaties and was posing enormous diplomatic risks, that it was carrying nuclear weapons in violation of regulations on their whereabouts and in deliberate deception of the Secretary of Defense, that the Special Assistant to the Secretary had been lied to by the Navy, none of these was brought up by Burke nor was he willing to hear about. His position was that it was absolutely unacceptable that the Secretary of Defense should presume to tell the Navy where to put its ships.

Harry got the impression that Nitze left the office very shaken by the experience, by Burke's willingness to confront him in this way, but determined to have the Navy brought into line. He himself was not in a clearcut command position with respect to Burke, except as he was accepted as a direct representative of the Secretary. So everything depended on McNamara's standing by his directive and backing Nitze up on this issue. Harry told me that Nitze went to McNamara and told him this was of the highest urgency and that he should order Burke to comply with his directive and with the treaty.

I asked Harry, "So what's happened?"

"McNamara decided to withdraw the directive. He backed off. With all the fights he's having with the Services he didn't want to add this one."

I asked, "Does McNamara know he was lied to by the Navy?"

Harry said, "Yes, that's what made him furious in the first place. It's what got him to send the directive." But faced with Nitze's account of Burke's own fury, McNamara had to pick his fights, which included a struggle over the number of nuclear-powered carriers.

No Secretary of Defense before McNamara had tried to exercise command authority over military operations. Before the 1958 Reorganization Act that put the Secretary of Defense in the chain of military command, no Secretary had even had such authority on paper. Their authority covered procurement, budget, personnel, administration, but not operational military matters. And since 1958 neither McElroy nor Gates had tried to exercise their new command authority over operations. McNamara was ready to do that, but he was being cautious. In this case, I could guess, he would face the likelihood that the Navy would leak the dispute to a friendly committee in Congress, in distorted fashion, and make him defend himself from the charge he was unduly entering into operations by ordering around individual ships.[12]

That is, he might have faced from some hostile committee chairman the question I got from the Vice President of RAND, Dick Goldstein, when I returned to California. There had been a meeting of the Air Force Advisory Board that controlled the RAND budget, on which General LeMay sat. Goldstein called me into his office and said, "Dan, this is hard to believe, but we have a charge here from General LeMay--he's been told by Admiral Burke--that you have been giving the Navy orders on how to operate a destroyer squadron. Is this possible?"

I said, "What?!" I couldn't deny that most of the things I was doing in Washington would look madly presumptuous to most military officers, but I felt pretty sure I hadn't done anything like that. It took a second or two to guess what it must be referring to. The mention of Burke was the tip-off. I told Goldstein the whole story and he passed it on. No one reprimanded me,

though Burke had asked LeMay to have me fired from RAND.

So the *San Joaquin County* went back to Japan.

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During this work on the BNSP and my efforts to get the *San Joaquin County* out of Iwakuni, and for a month afterward, I continued my work on trying to determine the existence of the Eisenhower delegation letter. I concluded tentatively that the belief in the Pacific was based on a myth, one that it was clearly important to dispel. Of course, I couldn't be definitive about such a negative finding. It was a matter of my judgment that Shepherd and the other officers were not deceiving me and that it was unlikely that such an authorization, still less actual letters, could have been passed to the commanders even before Shepherd's arrival without Shepherd being able to find any hint of it and without any of the others knowing about it.

I reported this to McGeorge Bundy's new deputy Carl Kaysen (who had read my honors thesis at Harvard and recommended me for the Society of Fellows). I told him it was a puzzling situation. I had failed to find anyone in the Washington area, where the supposed delegation had been made and where highest-level command was exercised, who had even heard that anyone anywhere believed that someone outside Washington was authorized to launch nuclear attacks on his own under some circumstances when Washington itself had not been destroyed. Yet there seemed no reason to doubt either that officers in the Pacific believed that such a delegation had been made or that lower-level sub-delegation had actually occurred.

There were several possibilities. The officers in the Pacific might be right and those I talked to

in the Washington area might be simply ignorant of the situation. Or the latter officers might all be giving me a runaround. Given my credentials from the White House it was unlikely that they would all be doing that independently, but it wasn't quite out of the question, in a matter as sensitive as this, that a lot of phoning had been going on (which would have meant a concerted effort to keep the information from the President, or at least from his National Security Assistant. Unlikely, but not quite impossible). I didn't think that either of these was probably the case.

I told Kaysen that the best judgment I could make was that it was the officers in the Pacific who were misled. The supposed letters from Eisenhower probably did not exist. But I felt quite sure that the belief in the letters was real and that it had real consequences, dangerous ones, that needed correcting. It provided a false precedent for the lower-level delegations that CINCPAC and perhaps others were reported to have made, which I was quite sure did exist. (If the Eisenhower letters did exist, after all, the precedent was not false, but just as dangerous in its effects). So there remained a dangerous situation that Kennedy needed to address.

It didn't make sense for President Kennedy to allow the sub-delegations to persist if he wasn't willing himself to make the delegation to CINCPAC and other theater and SAC commanders which Eisenhower had supposedly made but apparently had not. And I didn't think he should do that, in large part because it would then be organizationally quite hard to keep further delegations from being made, though he could try.

I thought he ought to do a further investigation to confirm what I had found in the Pacific, that various levels of command <u>believed</u> they were authorized to launch nuclear operations without explicit Presidential command, and if it were confirmed, he should explicitly refute this belief.

About a month later, in late June or early July of 1961, I was in Kaysen's office in the Executive Office Building when he mentioned to me, "By the way, we found your black notebook."

"What notebook?" I hadn't heard of a notebook, and I hadn't mentioned one to him.

"The one with the letters from Eisenhower."

He pointed to a looseleaf notebook on a table by his window. He told me there were copies in it of letters signed by Eisenhower to each of the theater commanders, along with SAC and NORAD, who controlled nuclear weapons, specifying circumstances under which they were authorized to use nuclear weapons without immediate Presidential authorization.

He said the circumstances included the need, in their judgment, for fast action at a time when communications were out with Washington. But they weren't limited entirely to that. They also provided for situations when the President was physically incapacitated, as during Eisenhower's stroke. (That didn't seem to allow for command to be reserved for the Secretary of Defense, who was made second in the chain of command by the National Security Act of 1958. But these letters were originally sent in 1957).

I should have asked to read the actual letters, but I didn't. Nor did I press for details when I asked him how he had found them. He just told me he hadn't been entirely satisfied by my conclusions and had kept probing, and the notebook had finally turned up.

I asked, "What has the President decided to do?"

"Nothing. He's not doing anything. He's letting them stand."

This wasn't what I wanted to hear. I asked him, "Why is he doing that?"

Kaysen said, "This is not the time for Lieutenant Kennedy to reverse the decision of the Great

General."

"Lieutenant" was Kennedy's rank in World War II. He had run in all his campaigns as a war hero, but that status had been earned after he had allowed his PT boat to be cut in two by a Japanese destroyer. He wasn't seen as a draft dodger like Clinton, but in June of 1961, after the Bay of Pigs in April and just after the Vienna Summit in which, it was widely rumoured about town, he had not stood up strongly to Khrushchev, Kennedy's standing in the Pentagon was not greatly different from Clinton's after the gays-in-the-military confrontation.

It was not unrelated to those events and that image that Kennedy had just named as Chief of Staff of the Air Force General Curtis LeMay, the man who had questioned to Kaysen and me whether a civilian like Kennedy should be part of the nuclear command process at all.[13] Kennedy might be Commander-in-Chief but he had never been Supreme Commander of Allied Forces in Europe and it wasn't the time, Kaysen was saying, for him to be disagreeing with the prior judgment of the general who had been.

By simply letting the letters stand when his subordinates found them through an "informal" process, instead of either rescinding them or issuing new ones over his own signature, Kennedy managed to avoid a confrontation with the military in which he would be pitted against the authority of Eisenhower. And he did this without taking on himself the responsibility for the delegation.

His fingerprints weren't on any decision at all. He could plausibly deny ever having seen the Eisenhower letters or knowing of their existence. He couldn't have done that convincingly if his Assistant for National Security had officially asked the JCS about the letters and had been given the file by them.

Looking back on this, I could guess why Bundy had asked me, a consultant, to investigate the situation for him, rather than simply phoning the Chairman of the Joint Chiefs or the Director of the Joint Staff and asking him directly whether such letters existed. It left him free to handle it, in case the letters turned up, exactly as he did. It allowed him to say nothing at all to the Joint Chiefs, and in particular it gave him the option of denying, if the matter were ever brought up, that he or the President knew anything about the situation.

The worst case in which that might arise would be an investigation, if Washington survived, after one of the commanders had actually acted on the Eisenhower delegation, launching nuclear weapons when communications were out during a crisis. The more likely case for which this "plausible denial" was being prepared would be that someone in Congress or the media found out about the delegation (not just rumors about it) and investigated it.

I don't know, and I wasn't meant to know, whether the matter was ever brought to Kennedy's attention at all. Probably it was. I could have asked and might well have been told, but I would have been expected to keep the answer to myself, and whatever I said later could easily have been denied.

So, given that Lieutenant Kennedy didn't want to reverse General Eisenhower and cancel his letters, it was convenient for him to be able to act as if he'd never heard of the issue. But from my point of view there was a real drawback to handling it that way. It meant that Kennedy and the NSC didn't look into or do anything about the problem that seemed to me the greatest danger, the sub-delegations and the general looseness of control <u>below</u> the level of the four-star admiral or general.

If Kennedy had chosen to reaffirm explicitly Eisenhower's decision, signing new letters to the theater commanders, I still would have urged Kaysen and Bundy to make sure that this time the letters

ruled out further delegation. A failure either to withdrew Ike's letters or to send out new letters made that more serious problem hard to address. But maybe that wasn't just an oversight either. To do what I wanted would have meant a confrontation with the military over the issue of sub-delegation just as sharp as the one to be expected if Kennedy had tried to withdraw Ike's delegation to CINCPAC, CINCSAC and the other unified and specified commanders. The NSC, presumably at Kennedy's decision, backed off from that fight.[14]

I never found out why I had been unable to confirm the existence myself earlier. When I raised the issue much later with Tazewell Shepherd, by now a Captain, after Kaysen had turned up the letters, he assured me convincingly that he hadn't been kidding me, he really hadn't known of their existence when I asked.[15] Which meant that, like Bundy, the President hadn't known either, for the first six months of his administration. If I hadn't run across the issue in the Pacific and raised it with Bundy when I did, no one in the White House might have known of it for a lot longer than that.[16]

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In August of 1961 I went to Strategic Air Command Headquarters in Omaha to find out the SAC reaction to the guidance that I had drafted, with (Lt. Col.) Bob Lukeman's help, for McNamara to send to General Power, Commander-in-Chief of SAC. It directed Power to find ways to adapt current planning and operations as soon as possible to the new guidance I had drafted earlier on the plans and options for general war, which was not scheduled for full implementation until the next year.

I talked to Colonel Dave Leibman, now chief of War Plans for SAC, who I had earlier known

well and worked with when he worked under General Glen Kent in the Air Force Plans Division (Policy and Plans? Long-range Plans?), along with Lukeman, Ernie Cragg, and Russ Dougherty (who later became Commander of SAC).

Leibman said my guidance had been received, after some initial reserve, with approval. The attitude in Omaha, radiating from General Power, was "We can work with this."

The Berlin Crisis was in full swing at this moment, and Leibman mentioned that the JCS, at the urging of General Power of SAC, had sent an official memorandum to the President assuring him that "if worst came to worst" and it was necessary to execute the plan for general war--i.e., a US first strike against the Soviet Union, not out of the blue but as an escalation of conflict in Europe arising over the Berlin Corridor--casualties in the US, though tragic, would be limited to ten million.

I said: "Ten million?! That's the population of metropollitan New York! A single large warhead on New York or LA could give you that! How could it be limited to that?"

Nevertheless, Dave said, that is what the JCS had told the President. They were trying to stiffen his resolve in the Berlin Crisis.

Obviously, they were not including casualties in West Europe, although the Soviets had hundreds of medium-range and intermediate range missiles within range of Europe, along with medium bombers. There could have been 100 million dead in West Europe, but the JCS presumably felt the president would be so much less concerned with those that they didn't need to mention them.

Later in the conversation in his office we were discussing the June estimate of Soviet missiles issued by the CIA. This was the last "missile gap" estimate. The estimate of what they had currently was lower than had earlier been estimated for 1961, but it was still several times greater than the 40

Atlas and Titan missiles the US had operational. I believe the number in the text (the main, consensus view, including CIA) was 120 ICBMs.

For once, the estimate of the State Department's Intelligence and Research Director (Roger Hilsman) was higher than the "community" estimate of current Soviet deployment. He took a footnote (the formula for registering a dissent) to estimate something like 160 missiles at that time. Except for the Army and Navy, which continued to take a footnote maintaining that the Soviets had deployed only "a few" missiles, the others all agreed that in the future Soviet deployments would be huge and the "gap" over US programs very large, with thousands of Soviet ICBMs by the late Sixties.

Leibman asked me: "Do you know what the Old Man [General Power, CINCSAC] believes they have now?"

"Tell me."

"One thousand."

"Deployed? Right now?"

"Yes."

It was estimates like this that underlay the Air Force pressure for huge increases in force size, which was obviously their purpose. McNamara was just then confronting the question of the prospective scale of a force of Minuteman missiles, hardened solid-fuel (quickly launched) missiles of a kind that didn't exist yet on either side. He couldn't admit inside the Pentagon that he was even considering a number as low as one thousand (which was his private target, and which he got the president to approve in the fall as the lowest figure they could get through Congress "without being murdered"). The Air Force wanted ten thousand.

I thought back to what Leibman had said about the consequences of a US first strike, and I saw a chance to use some leverage to reduce the SAC estimate and its pressure on force planning. I said, "One thousand. Do you think you can locate all of them exactly right now?"

"No, not yet."

"How many does SAC think it can locate now?"

"About two hundred."

I said, "Well, that leaves eight hundred ICBMs you can't find now."

"800 ICBMs left standing after you've conducted your best first strike. And you're telling the President that there would be only ten million US fatalities after a US first strike...

"Do those two estimates really match up? Isn't there something wrong about one of them?"

Leibman narrowed his eyes and scrunched his mouth. He nodded. "You know, that's a very interesting question. I don't think I've ever heard it raised before."

He thought for a while more, then he said,"There's someone I'd like to hear you put that question to. I'd like to hear how he answers it."

He took me down into the underground bowels of the SAC Headquarters and introduced me to a general who was Deputy Commander of SAC for Intelligence, a man I had heard described as "a real intellectual" (he had a Ph. D. in political science, as I recall) and "the father of the missile gap" (one of several rivals for that honor).

Leibman told the general, who was accompanied by a couple of colonels, that I had just raised quite an interesting question, which he asked me to repeat. I did. The general didn't answer it. Instead

he reacted almost exactly the way Leibman had. He nodded soberly and said, "That is an interesting question. Hmnn..."

After a short silence I said, "You know, if you're trying to encourage the President to take a strong stand with the Russians over Berlin, it might not serve your purpose to tell him he's facing a thousand Soviet missiles."

The general sat up sharply at this and looked shocked and incredulous. "You're not suggesting, are you, that we should fudge our estimates?"

He looked piercingly at me and I looked piercingly back at him, searching his face for irony and not finding any. He seemed totally unselfconscious of the widespread reputation of Air Force estimators, SAC above all, for blowing smoke. But this was not, it seemed, the moment to share a smile about this.

I said: "Certainly not. Of course not." ("Heavens no," I wanted to say). "But...if there should be a range of uncertainty, it might not be best from every point of view to emphasize only the upper end of that range."

Shortly Leibman led me away.

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The 1964 election campaign was very unusual in focusing primarily on foreign policy, two foreign policy issues. One of these, which will be discussed at length later, was whether or not to escalate the war in Vietnam. But the #1 issue of the campaign was the control and use of nuclear

weapons, in Europe and in Vietnam.

At an early point in the campaign Goldwater, who was both a Senator on the Armed Services Committee and a Reserve Major General in the Air Force, said that small nuclear weapons could be used effectively in Vietnam, for example "to blow the leaves off trees."[17] He later tried to downplay that particular notion, but he gave great attention to a proposal that major field commanders like CINCEUR in Western Europe should be delegated the authority by the President to use "small, conventional nuclear weapons" (sic) on their own initiative.

President Johnson happily accepted this challenge and moved it to first place among the issues of the campaign. Traditionally the Democratic presidential campaign started officially on Labor Day in Detroit. Johnson made the issue of presidential command of nuclear wapons the main subject of his speech on this day, the opening speech of his campaign. He derided the notion that there was any such thing as a "conventional" nuclear weapon. The tactical weapons Goldwater was calling "small," he pointed out, averaged the size of the weapon that destroyed Hiroshima. (He arranged that week for McNamara to give background briefings on this subject at the Pentagon).

The issue of whether and when to use such weapons was the most serious responsibility that any president was charged with, Johnson pointed out. Under the law, it was his alone. He never had, and he never would delegate that decision to anyone.

After I read that, I asked Adam Yarmolinsky, the Assistant to the Secretary of Defense, if Johnson had changed the policy. (Yarmolinsky was coordinating answers to Goldwater's charges relating to defense. I had just joined the Defense Department as Special Assistant to the Assistant Secretary of Defense for International Security Affairs in August. One thing I wrote for Yarmolinsky

was a long critique of Goldwater's (absurd) claim that the Soviet Union had pulled ahead of the US in strategic military capability).

I told him about Eisenhower's letters of delegation and JFK's choice to let these stand. Goldwater's proposal went beyond these because he would have given the theater commanders the authority to use tactical nuclear weapons on their own regardless of whether or not the president was functioning and in communication. But LBJ's flat statements that he had not and would not delegate under any circumstances were inconsistent with the secret authorization by Eisenhower that JFK had tacitly continued. Had LBJ withdrawn that authorization?

Yarmolinsky didn't know, and he suggested that I should try to find out. I went down to the Joint Staff that afternoon and before long got the answer. The letters were still in place. They had never been withdrawn or changed. I would have been glad to hear that LBJ had withdrawn them, as his speech had indicated. It was more obvious in 1964 than in 1961 that there wasn't any urgent military need for such delegation,[18] and the tone of seriousness about nuclear weapons in LBJ's speech sounded as good to me as it did to the public. The only trouble was, he didn't mean it.

Or did he even know, personally, about the secret letters? I couldn't be sure. Did Johnson himself know that his speech was seriously misleading? Senator Goldwater, major general in the Air Force, almost surely did. If he hadn't known it before, after Johnson's speech one of Goldwater's colleagues in the Air Force would surely have told him.[19]

But he wasn't likely to reveal that. In the first place, he would be telling a secret, which he would never never do as a good major general, unless it served his interests (like the secrets he was telling daily, the misleading classified data he was getting from the Air Force that appeared to support

his claims of US decline and inferiority). More importantly, the secret policy was one he agreed with and the public did not, so it would not serve his purposes to tell the public the truth about this.

[There was so much public reaction that Goldwater's position was outrageous, irresponsible, crazy, that he was led to round up highly authoritative support for it. ...(Twining Panel; see Time story on it, revealing prior delegation.) In 1977, Goldwater revealed that he had known of the Kennedy delegation...(see my WIN press conference, and his memoir...)

I don't have my files on this here in Kensington, so I'll elaborate the account of the Goldwater-Johnson debate back in Washington.]

Exactly the same situation applied in the case of the second major issue in the campaign, US escalation in Vietnam. Goldwater was calling for major bombing campaigns against North Vietnam and Laos. LBJ was rejecting this widening of the war (with the unnoticed proviso, "at this time"; he meant, in fact, "till right after the election is over," but virtually no one outside the Pentagon picked up this possible interpretation.) LBJ had the popular side of the issue, by an overwhelming margin. Yet secretly, though he had not yet formally made a decision, he had authorized planning in the Pentagon which was virtually sure to lead to a bombing campaign only different from Goldwater's in tactical design. (As in the case of delegation, Goldwater's policy would have been even more extreme, though no different in principle). And Goldwater knew this, from his annual active duty in the Pentagon in 1964 as part of his reserve service. He acknowledged this in 1971 when the Pentagon Papers came out.

But he didn't reveal it during the campaign. When he was asked, in 1971, why he hadn't, he said, "Who would have believed me?" He was then, after all, only a US Senator, the Republican

candidate for President, a member of the Armed Service Committee and an Air Force reserve Major General. Who would have believed him, against the public word of the President? The Pentagon Papers hadn't been published yet. It would, in fact, have been hard for journalists or Congress or the public to believe, without documentary evidence, that a President was lying or misleading as spectactularly as this charge by Goldwater would have implied. That is, as spectactularly as Johnson actually was.

Without documentary evidence. But Goldwater had as good access as I ever did to the documents that were later published in the Pentagon Papers. He had access in the Pentagon during the spring of 1964, and he could have had them from General LeMay or others during the campaign, just like the secret data on strategic posture that he received and used in speeches. In effect, he could have put out the 1964 sections of the Pentagon Papers in 1964 (as I myself could and should have done) instead of 1971. (I think that would have prevented the Vietnam War, so I've come to hold myself significantly at fault for not doing that in 1964-65, or thinking of it.)

He published comparable secrets about the strategic balance because he hoped it would get him elected. But wouldn't evidence of flagrant lying by the President also help get him elected? It might. But it might not, and this was a policy he wanted Johnson to carry out if he stayed in office. Revealing that it was Johnson's actual policy could cause a public reaction that would block that, just as Goldwater's similar policy was sinking his own campaign. That was why no one in the Air Force was revealing the secret preparations or giving the lie to Johnson's misleading campaign statements, and Goldwater shared the same Air Force point of view. He would have gained no points with his Air Force friends if he had broken ranks on this and told the truth. Besides, he hoped his own position was

more popular than Johnson's public position (though polls said otherwise), and he wasn't about to reveal that their policies were virtually the same.

All this is necessarily speculative, as to why he didn't say more at the time. What is fact is that he knew, and he didn't tell it. Both Goldwater and Johnson encouraged the public to believe that they differed sharply on this policy, while both secretly knew that their policies differed only marginally. It's not clear whether Goldwater appreciated just how unpopular his policy was till the votes were counted, but LBJ understood that his own secret policy, only marginally different from Goldwater's, would be just as unpopular, which is why he kept it secret.

1.

2. The recent book One-Point Safe, the more or less realistic journalistic account on which the movie is based, describes the current safety standard as "one-point safe," i.e. as requiring only that there will be no significant yield unless more than one section is accidentally detonated. Frank von Hippel tells me that this is correct, in terms of current standards for safe weapons. This would seem to be a lower standard than we were told about in 1960, but current designs might make it adequate. I am certain, from my notes, that the expression given to us and described then was "three-point safe," with anything less than that being regarded as significantly prone to nuclear accidents.

3. There wasn't an easy fix. They could make full-scale rehearsals, taking off from alert pads with bombs aboard, routine, so that an intense false alarm wouldn't create a near-certain conviction that war was underway.

This was what SAC did. And not without risk. Several accidents with planes on airborne alert causing the dropping or jettisoning of nuclear bombs led to high explosive detonations and in some cases the failure of safety mechanisms came close to permitting a nuclear yield. But the risks of this practice would have been much greater in the tactical forces. SAC weapons were much safer, and they were carried internally.

In the Pacific and elsewhere in the tactical forces, the future, hypothetical danger I was projecting of the dangers of a possible false alarm would have been lowered by drills, but these would have raised the immediate, recurrent danger of an accidental explosion at the base (or from an airborne collision or malfunction). That was not an appealing solution.

Tactical forces with these weapons could have been taken off alert, throughout the world. (That, unquestionably, is what should have been done, for a whole variety of reasons including this one). But that ran against a set of